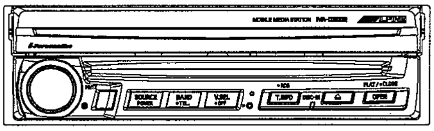
SERVICE MANUAL

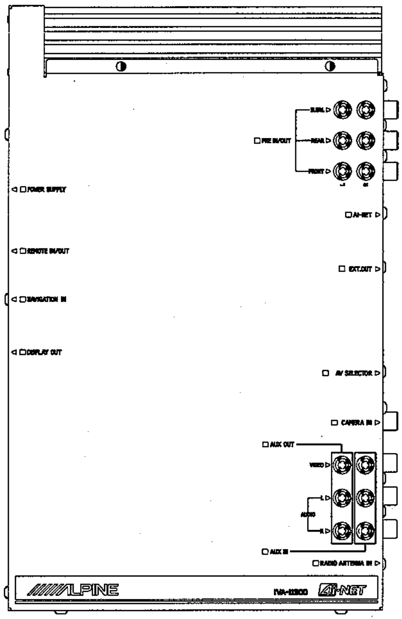
Mobile Multimedia Station

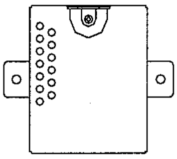
* The model is component system unit of Monitor Unit, Tuner Unit and DC/DC Converter Unit.

Caution : The part marked with ⚠ is generating a high Voltage, so care will be necessary when working.

* DVD region number (playable region number) : Region Number 2, 3, 4 or ALL




SUB.W
PRE IN/OUT
REAR
FRONT
POWER SUPPLY
Ai-NET
REMOTE IN/OUT
EXT.OUT
NAVIGATION IN
DISPLAY OUT
AV SELECTOR
CAMERA IN
AUX OUT
VIDEO
AUDIO
L
R
AUX IN
RADIO ANTENNA IN
ALPINE
IVA-D300
Ai-NET



TO ALPINE Home Page

5/04-A
68E36711S01

IVA-D300R/IVA-D300RB/ IVA-D300E

<Cautions for Safe Repair Work>

The following cautions will prevent accidents in the workplace and will ensure safe products.
*The symbols indicate caution is needed to prevent injuries and damage to property.
The symbols and their meanings follow.

⚠ **Warning**	If you ignore this symbol and handle the product incorrectly or unsafely, serious injury or death may result.
⚠ **Caution**	If you ignore this symbol and handle the product incorrectly or unsafely, injury or only material damage may result.

*The following symbols indicate two levels of cautions.

⚠	When you see this symbol, you have to be very careful.
❗	When you see this symbol, you have to follow the instructions there.

⚠ Warning

⚠	**Do not look squarely into the laser light coming from the pickup.** You may loose you sight.	❗	**Fuse Caution** Always use a designated fuse. Use of an incorrect fuse may result in a fire.

⚠ Caution

⚠	**Do not allow wiring to be caught in the screw/chassis.** If wiring is caught in the screw/chassis, it may cause a short circuit, resulting in a fire.	❗	**Battery Caution** Use the designated battery. Confirm the correct polarity and seat of the battery. An incorrect battery or an improperly connected or seated battery may result in a fire.
⚠	**High Temperature Caution** Touching the heat sink may cause severe burns.	❗	**Designated Parts Caution** Look up the part list and ensure that only designated parts are used to prevent problems or accidents.
⚠	**Reverse Power Supply Connections or Misconnections Caution** Reverse power supply connections or misconnections may cause ignition problems and smoke may result.	❗	**Wiring Caution** Ensure that the wiring is correct when rewiring to prevent problems with ignition/breakdown.
⚠	**Soldering Caution** Hot solder from solder splash may cause severe burns.	❗	**Wear Gloves** Wear gloves to prevent electrical shocks or injury from the end face of the metal.

⚠	**For the FDA laser standard, the following CAUTION label is stuck on each product.** Please be careful for repair. CAUTION-Laser radiation when open, DO NOT STARE INTO BEAM

Contents

Packing Assembly Parts List	4
Packing Method View	4
System Connections	5 to 16
Adjustment Procedures	17 to 22
Extension Cable	23
* Monitor Unit Block	24 to 81
* Tuner Unit Block	82 to 115
* DC/DC Converter Unit Block	116 to 120

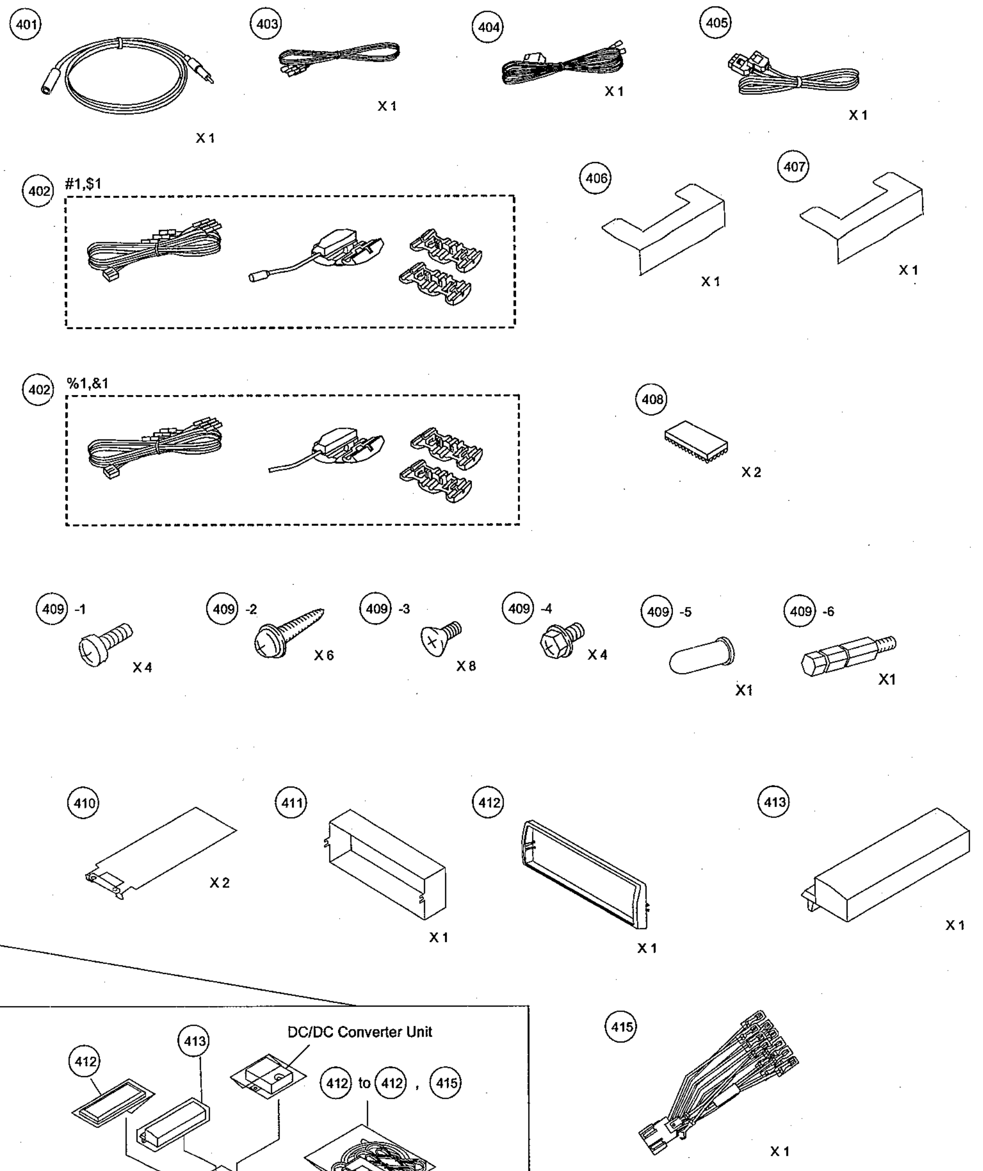
NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

Packing Assembly Parts List

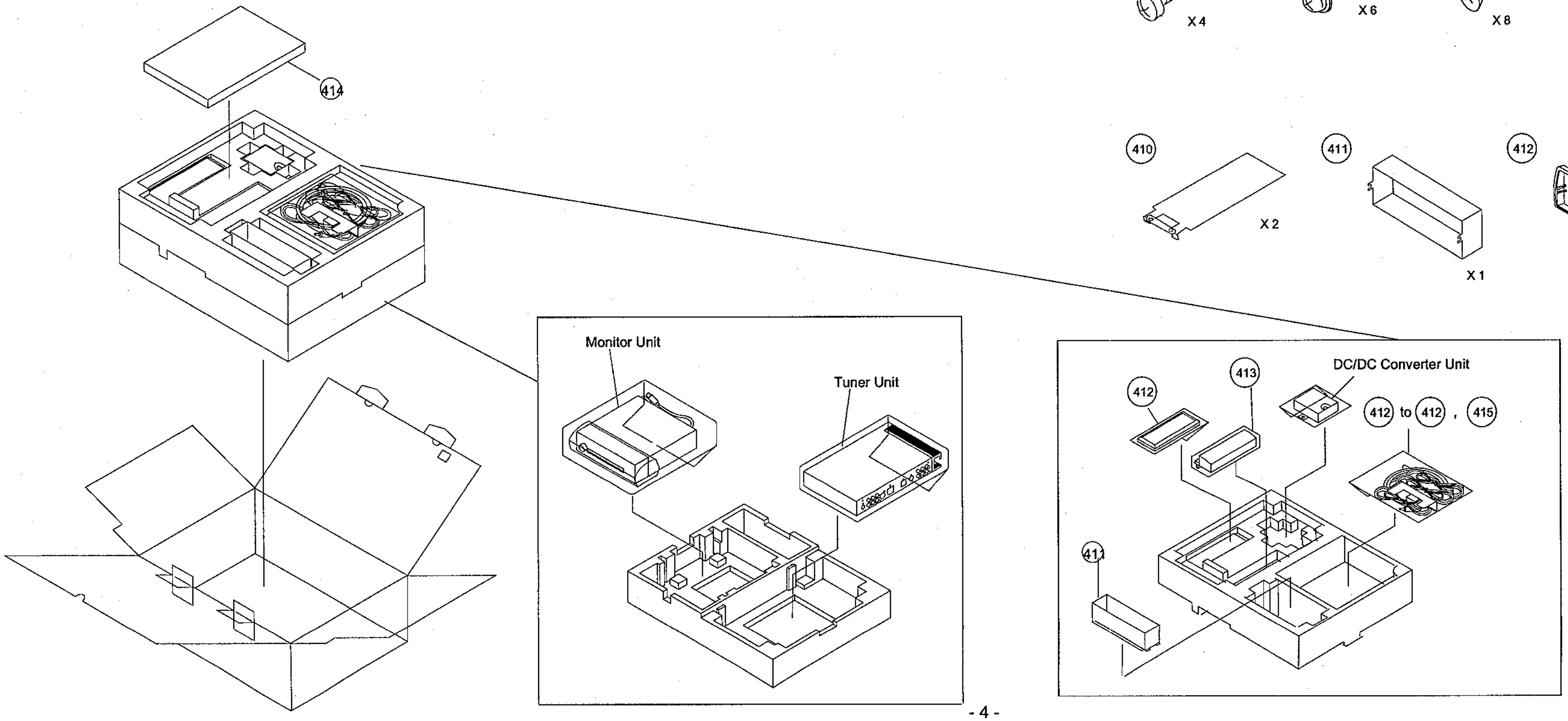
Symbol No.	Part No.	Description
401	01T95334W02	ASSY,ANT WIRE MAIN
#1 402	01T95205W16	ASSY,WIRE PWR D300J0
$1 402	01T95205W16	ASSY,WIRE PWR D300J0
%1 402	01T95205W15	ASSY,WIRE PWR D300E
&1 402	01T95205W15	ASSY,WIRE PWR D300E
403	01T75479Y01	ASSY,REMOTE D300
#1 404	01T75476Y02	ASSY,PWR WIRE-F 300J
$1 404	01T75476Y02	ASSY,PWR WIRE-F 300J
%1 404	01T75476Y01	ASSY,PWR WIRE-F 300A
&1 404	01T75476Y01	ASSY,PWR WIRE-F 300A
405	01T65563Y02	ASSY,DIN-CABL3M D300
406	07B50413W05	BKT,SIDE(L)
407	07B50413W06	BKT,SIDE(R)
408	75T58346F16	PAD,MAGIC TAPE
409-1	03S60820Y15	SCR,MCH 4X8 ZN A

Symbol No.	Part No.	Description
409-2	03S60828Y03	SCR,TPG 4X14 ZN A
409-3	03A31982Y01	SCR,M4X5 FLAT
409-4	03B44963F07	SCR,MCH M4X6
409-5	36A11113W01	CAP,RUBBER(A)
409-6	03A60836Y01	SCR,CUS 5X7 ZN A
410	07T75070W01	BKT,STOPPER ASSY
411	15D61379Y01	CASE,INNER
412	33C70776Y01	FACE,PLATE D300
413	15C70777Y01	COVER,NOSE D300
#1 414	68P70033Y32	O/M AOEU
$1 414	68P70033Y32	O/M AOEU
%1 414	68P70033Y65	O/M AAO
&1 414	68P70033Y65	O/M AAO
#1 415	01T15087Y01	ASSY,CVA-1000R ISO
$1 415	01T15087Y01	ASSY,CVA-1000R ISO

NOTE : #1 : For IVA-D300R(Region Number 2) Model Only, $1 : For IVA-D300RB(Region Number 2) Model Only,
%1 : For IVA-D300E(Region Number 3) Model Only, &1 : For IVA-D300E(Region Number 4) Model Only,
Others : Common.


401
X1
403
X1
404
X1
405
X1
402
#1,$1
406
X1
407
X1
402
%1,&1
408
X2
409 -1
X4
409 -2
X6
409 -3
X8
409 -4
X4
409 -5
X1
409 -6
X1
410
X2
411
X1
412
X1
413
X1
415
X1

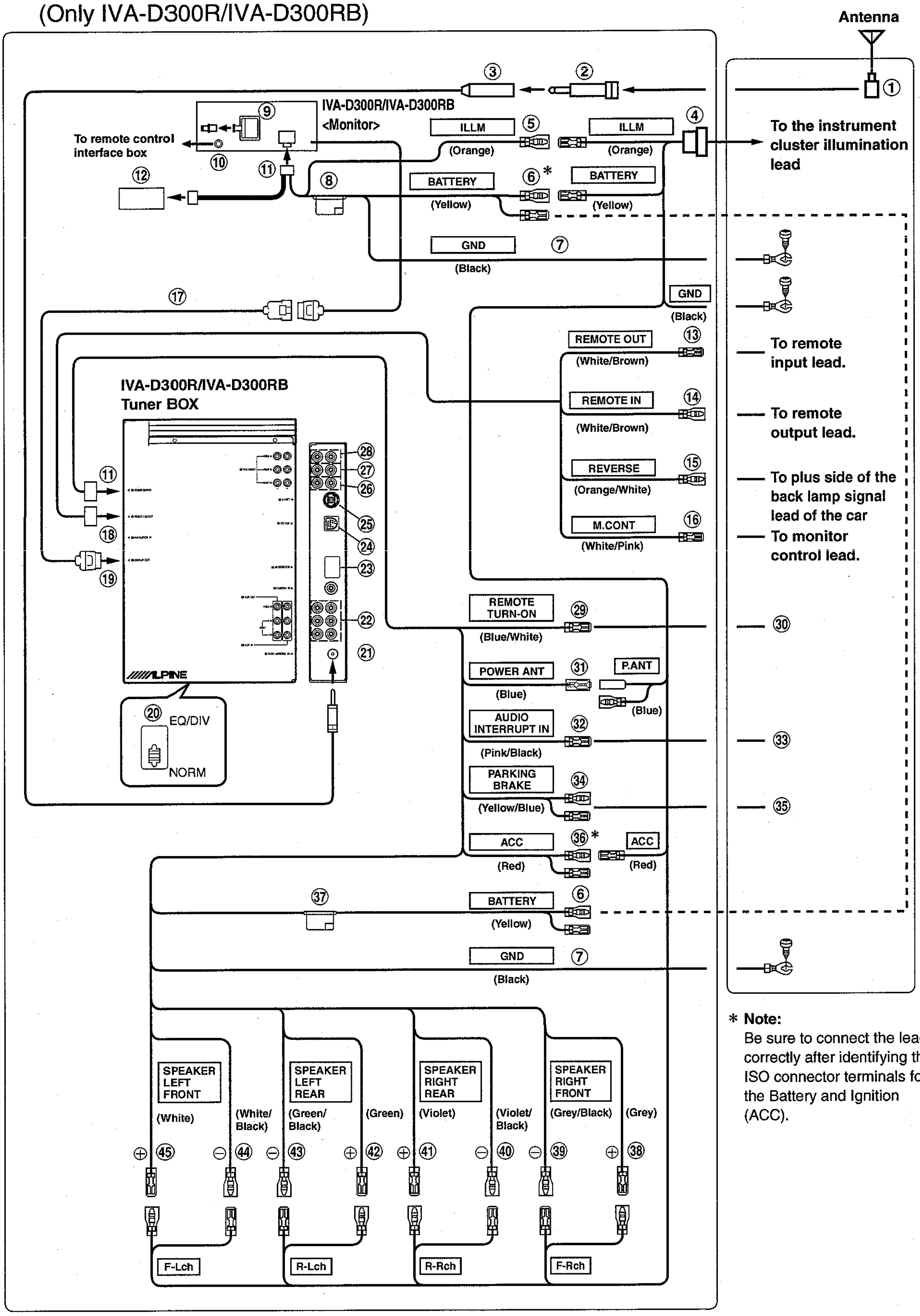
Packing Method View


414
Monitor Unit
Tuner Unit
412
413
DC/DC Converter Unit
412 to 412 , 415
411

TO CONTENTS

System Connection

(Only IVA-D300R/IVA-D300RB)


Antenna
①
②
③
IVA-D300R/IVA-D300RB
<Monitor>
To remote control interface box
⑨
⑩
⑪
⑫
④
ILLM
⑤
ILLM
(Orange)
(Orange)
To the instrument cluster illumination lead
⑧
BATTERY
⑥*
BATTERY
(Yellow)
(Yellow)
GND
⑦
(Black)
⑰
GND
(Black)
REMOTE OUT
⑬
(White/Brown)
To remote input lead.
REMOTE IN
⑭
(White/Brown)
To remote output lead.
REVERSE
⑮
(Orange/White)
To plus side of the back lamp signal lead of the car
M.CONT
⑯
(White/Pink)
To monitor control lead.
IVA-D300R/IVA-D300RB
Tuner BOX
⑪
⑱
⑲
㉘
㉗
㉖
㉕
㉔
㉓
㉒
㉑
ALPINE
⑳ EQ/DIV
NORM
REMOTE TURN-ON
㉙
(Blue/White)
㉚
POWER ANT
㉛
P.ANT
(Blue)
(Blue)
AUDIO INTERRUPT IN
㉜
(Pink/Black)
㉝
PARKING BRAKE
㉞
(Yellow/Blue)
㉟
ACC
㊱*
ACC
(Red)
(Red)
㊲
BATTERY
⑥
(Yellow)
GND
⑦
(Black)
SPEAKER LEFT FRONT
(White)
(White/Black)
SPEAKER LEFT REAR
(Green/Black)
(Green)
SPEAKER RIGHT REAR
(Violet)
(Violet/Black)
SPEAKER RIGHT FRONT
(Grey/Black)
(Grey)
⊕ ㊺
⊖ ㊹
⊖ ㊸
⊕ ㊷
⊕ ㊶
⊖ ㊵
⊖ ㊴
⊕ ㊳
F-Lch
R-Lch
R-Rch
F-Rch

∗ Note:
Be sure to connect the leads correctly after identifying the ISO connector terminals for the Battery and Ignition (ACC).

- *Set the system switch to "NORM" when only a changer is connected (when the Ai-NET compatible equalizer is not used).*

TO CONTENTS

① **ISO Antenna Plug**

② **ISO Antenna Converter Plug (Included)**

③ **Antenna Extension Cable**

④ **ISO Connector (Included)**

⑤ **Illumination Lead (Orange)**
This lead may be connected to the vehicle's instrument cluster illumination lead. This will allow the backlighting of the IVA-D300R/IVA-D300RB to dim whenever the vehicle's lights are turned on.

⑥ **Battery Lead (Yellow)**
Connect this lead to the positive (+) post of the vehicle's battery.

⑦ **Ground Lead (Black)**
Connect this lead to a good chassis ground on the vehicle. Make sure the connection is made to bare metal and is securely fastened using the sheet metal screw provided.

⑧ **Fuse Holder (10A)**

⑨ **Digital Output Terminal (Optical)**
Use when combining fiber digital input compatible products.

⑩ **Remote Control Interface Connector**
Connect to the remote control interface box.

⑪ **Power Supply Connector**

⑫ **DC/DC Converter**

- *Do not install the converter at a location subjected to water such as under the floor mat or air conditioner. This may cause a malfunction.*
- *Do not bundle the DC/DC converter cable with other audio cables. Also, do not install the cables directly next to the unit. Doing so may induce noise into your system.*
- *Keep the DC/DC converter away from the Antenna cables and the rear side of the unit, otherwise noise may be generated when receiving radio broadcast.*

⑬ **Remote Control Output Lead (White/Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

⑭ **Remote Control Input Lead (White/Brown)**
Connect the external Alpine product to the remote control output lead.

⑮ **Reverse Lead (Orange/White)**
Use only when a back-up camera is connected. Connect to the plus side of the car's reverse lamp that lights when the transmission is shifted into reverse (R).
Switches the video picture to the back-up camera. This is linked with putting the car into reverse (R).

⑯ **Monitor Control Lead (White/Pink)**
Connect this to the Monitor Control Lead of the touch panel-compatible rear monitor.

⑰ **Monitor Extension Cable (Included)**

⑱ **Remote IN/OUT Terminal**

⑲ **Display Output Terminal**

⑳ **System Switch**
When connecting an equalizer or divider using Ai-NET feature, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.

- *Be sure to turn the power off to the unit before changing the switch position.*

㉑ **Antenna Receptacle**

㉒ **AUX Input Terminals/AUX Output Terminals**
If these terminals are connected to the optional expansion box (VPE-S431), the AUX input and output terminals are not used on this unit. Connect AUX IN 1, 2 and 3, and the AUX OUT 1 and 2 terminals of the extension box (VPE-S431) to the external device(s).

㉓ **AV Select Connector**
When this connector is connected to the optional expansion box (VPE-S431), connect this to the HEAD UNIT terminal of VPE-S431.

㉔ **Ext. Output Connector**
If this connector is connected to the optional Amplifier Link compatible monaural Amplifier, connect this to the optional Amplifier Link Box, and output the Amplifier Link control signal.

㉕ **Ai-NET Connector**
Connect this to the output or input connector of other product (CD changer, Equalizer, etc.) equipped with Ai-NET.

㉖ **Front input/output Terminal**
Use when connecting an amplifier or equalizer.

㉗ **Rear input/output Terminal**
Use when connecting an amplifier or equalizer.

㉘ **Subwoofer output Terminal**
Connect the input lead of an amplifier for the subwoofer to this terminal.

㉙ **Remote Turn-On Lead (Blue/White)**
Connect this lead to the remote turn-on lead of your amplifier or signal processor.

㉚ **To amplifier or equalizer**

㉛ **Power Antenna Lead (Blue)**
Connect this lead to the +B terminal of your power antenna, if applicable.

㉜ **Audio Interrupt In Lead (Pink/Black)**

㉝ **To vehicle phone**

㉞ **Parking Brake Lead (Yellow/Blue)**
Connect this lead to the power supply side of the parking brake switch to transmit the parking brake status signals to the IVA-D300R/IVA-D300RB.

㉟ **Connect this lead to the parking brake lead powered when parking brake is engaged.**

㊱ **Switched Power Lead (Ignition) (Red)**
Connect this lead to an open terminal on the vehicle's fuse box or another unused power source which provides (+) 12V only when the ignition is turned on or in the accessory position.

㊲ **Fuse Holder (10A)**

㊳ **Right Front (+) Speaker Output Lead (Grey)**

㊴ **Right Front (–) Speaker Output Lead (Grey/Black)**

㊵ **Right Rear (–) Speaker Output Lead (Violet/Black)**

㊶ **Right Rear (+) Speaker Output Lead (Violet)**

㊷ **Left Rear (+) Speaker Output Lead (Green)**

㊸ **Left Rear (–) Speaker Output Lead (Green/Black)**

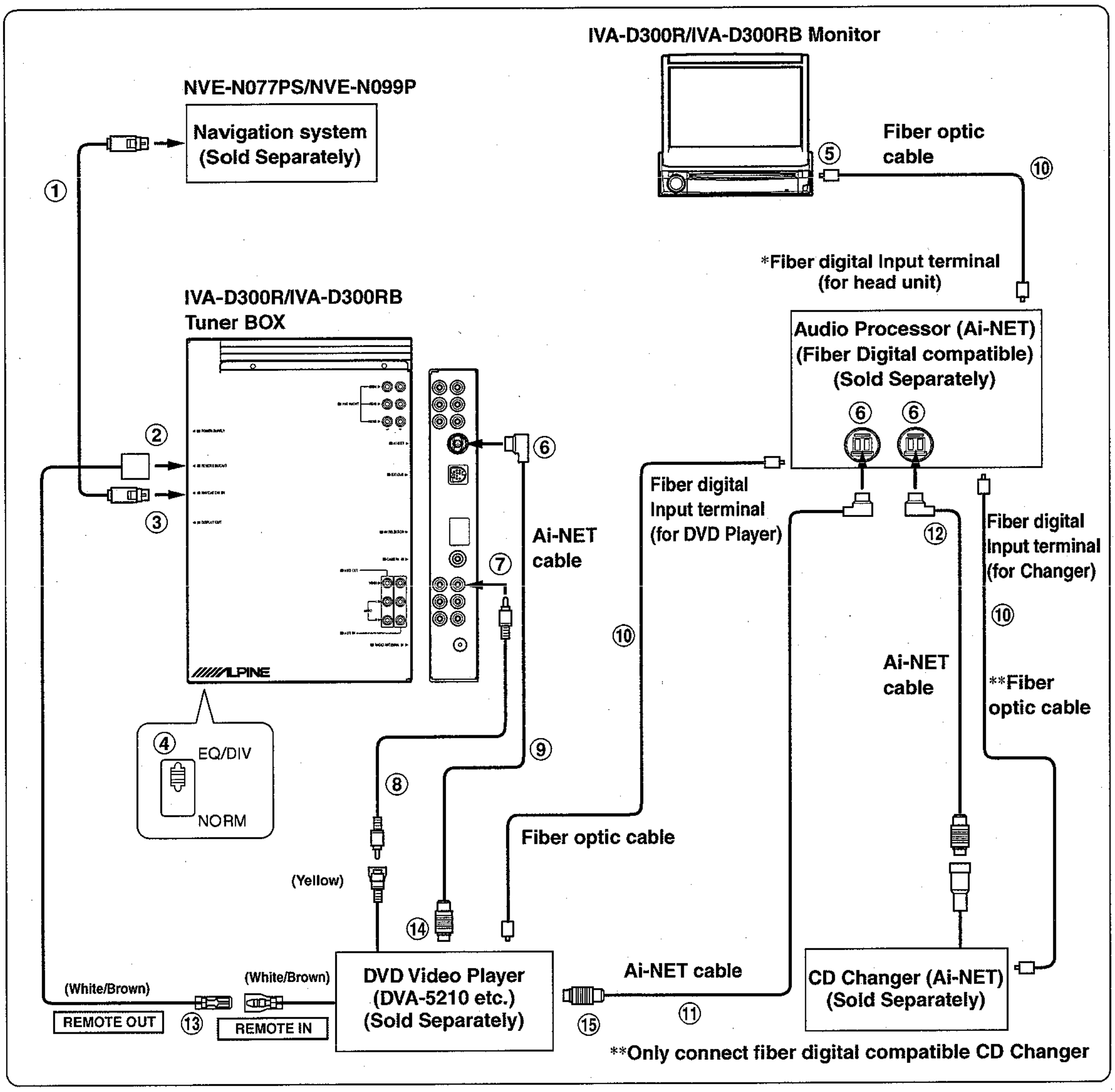
㊹ **Left Front (–) Speaker Output Lead (White/Black)**

㊺ **Left Front (+) Speaker Output Lead (White)**

TO CONTENTS

(Only IVA-D300R/IVA-D300RB)

Connect the Ai-NET compatible audio processor (Fiber digital compatible), Navigation system, DVD player and changer.


IVA-D300R/IVA-D300RB Monitor
NVE-N077PS/NVE-N099P
Navigation system
(Sold Separately)
①
⑤
Fiber optic
cable
⑩
*Fiber digital Input terminal
(for head unit)
IVA-D300R/IVA-D300RB
Tuner BOX
Audio Processor (Ai-NET)
(Fiber Digital compatible)
(Sold Separately)
⑥ ⑥
②
⑥
③
Fiber digital
Input terminal
(for DVD Player)
Ai-NET
cable
⑦
⑫
Fiber digital
Input terminal
(for Changer)
⑩
⑩
Ai-NET
cable
**Fiber
optic cable
ALPINE
④
EQ/DIV
NORM
⑨
⑧
Fiber optic cable
(Yellow)
⑭
(White/Brown)
(White/Brown)
DVD Video Player
(DVA-5210 etc.)
(Sold Separately)
Ai-NET cable
CD Changer (Ai-NET)
(Sold Separately)
REMOTE OUT
⑬
REMOTE IN
⑮
⑪
**Only connect fiber digital compatible CD Changer

- *When the fiber digital compatible product is connected, it is necessary to set the mode of this unit. Refer to "Setting the Digital Output" and set to ON. Then refer to "Optical Digital Input Selection for an External Audio Processor" and switch the setting.*
- ** When connecting with PXA-H510 :*
  - *Connect the fiber digital input terminal to the DVD.*
  - *IVA-D300R/IVA-D300RB and DVA-5205P or DVA-5210 cannot be connected simultaneously when fiber digital is in use.*
- *When the NVE-N055PS is connected for the Navigation System, use the RGB conversion cable KCE-030N (Sold separately).*

Please observe the following when using Fiber Optic Cable.

- *Do not coil the Fiber Optic Cable smaller than a 30 mm radius.*
- *Do not place anything on top of the Fiber Optic Cable.*

TO CONTENTS

① **RGB Cable (Included with Navigation)**

② **Remote IN/OUT Terminal**

③ **RGB Input Terminal**
Connect this to the RGB output terminal of the Navigation System.

④ **System Switch**
When connecting an equalizer or divider using Ai-NET feature, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.

- *Be sure to turn the power off to the unit before changing the switch position.*

⑤ **Digital Output Terminal**

⑥ **Ai-NET Connector**
Connect this to the output or input connector of other product equipped with Ai-NET.

⑦ **AUX Video Input Terminal**
Connect the video output lead of a DVD video player or DVD changer to this terminal.

⑧ **RCA Extension Cable (Included with DVD video player)**

⑨ **Ai-NET Cable (Included with DVD video player)**

⑩ **Fiber optic Cable (Sold Separately)**

⑪ **Ai-NET Cable (Included with Audio Processor)**

⑫ **Ai-NET Cable (Included with CD Changer)**

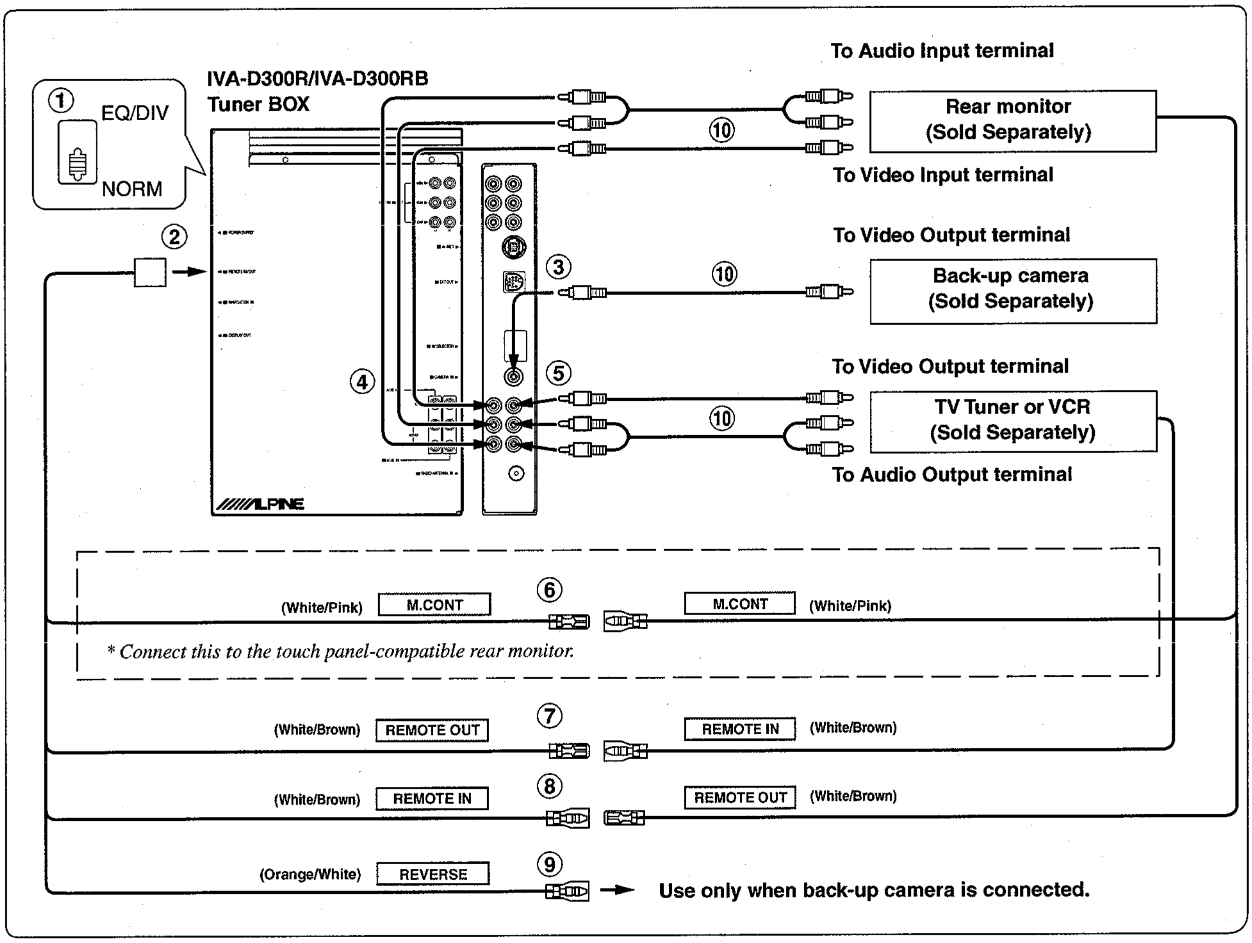
⑬ **Remote Control Output Lead (White/Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

⑭ **To Ai-NET Connector (Grey)**

⑮ **To Ai-NET Connector (Black)**

TO CONTENTS

(Only IVA-D300R/IVA-D300RB)


To Audio Input terminal
IVA-D300R/IVA-D300RB
Tuner BOX
①
EQ/DIV
NORM
②
⑩
Rear monitor
(Sold Separately)
To Video Input terminal
To Video Output terminal
③
⑩
Back-up camera
(Sold Separately)
④
⑤
To Video Output terminal
⑩
TV Tuner or VCR
(Sold Separately)
To Audio Output terminal
ALPINE
(White/Pink)
M.CONT
⑥
M.CONT
(White/Pink)
(White/Brown)
REMOTE OUT
⑦
REMOTE IN
(White/Brown)
(White/Brown)
REMOTE IN
⑧
REMOTE OUT
(White/Brown)
(Orange/White)
REVERSE
⑨

** Connect this to the touch panel-compatible rear monitor.*

Use only when back-up camera is connected.

① **System Switch**
When connecting an equalizer or divider using Ai-NET feature, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.

- *Be sure to turn the power off to the unit before changing the switch position.*

② **Remote IN/OUT Terminal**

③ **CAMERA Input Terminal**
Use when connecting a back-up camera.

④ **AUX Video/Audio Output Terminal**
Use when connecting an optional monitor etc.

⑤ **AUX Video/Audio Input Terminal**

⑥ **Monitor Control Lead (White/Pink)**
Connect this to the Monitor Control Lead of the touch panel-compatible rear monitor.

⑦ **Remote Control Output Lead (White/Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

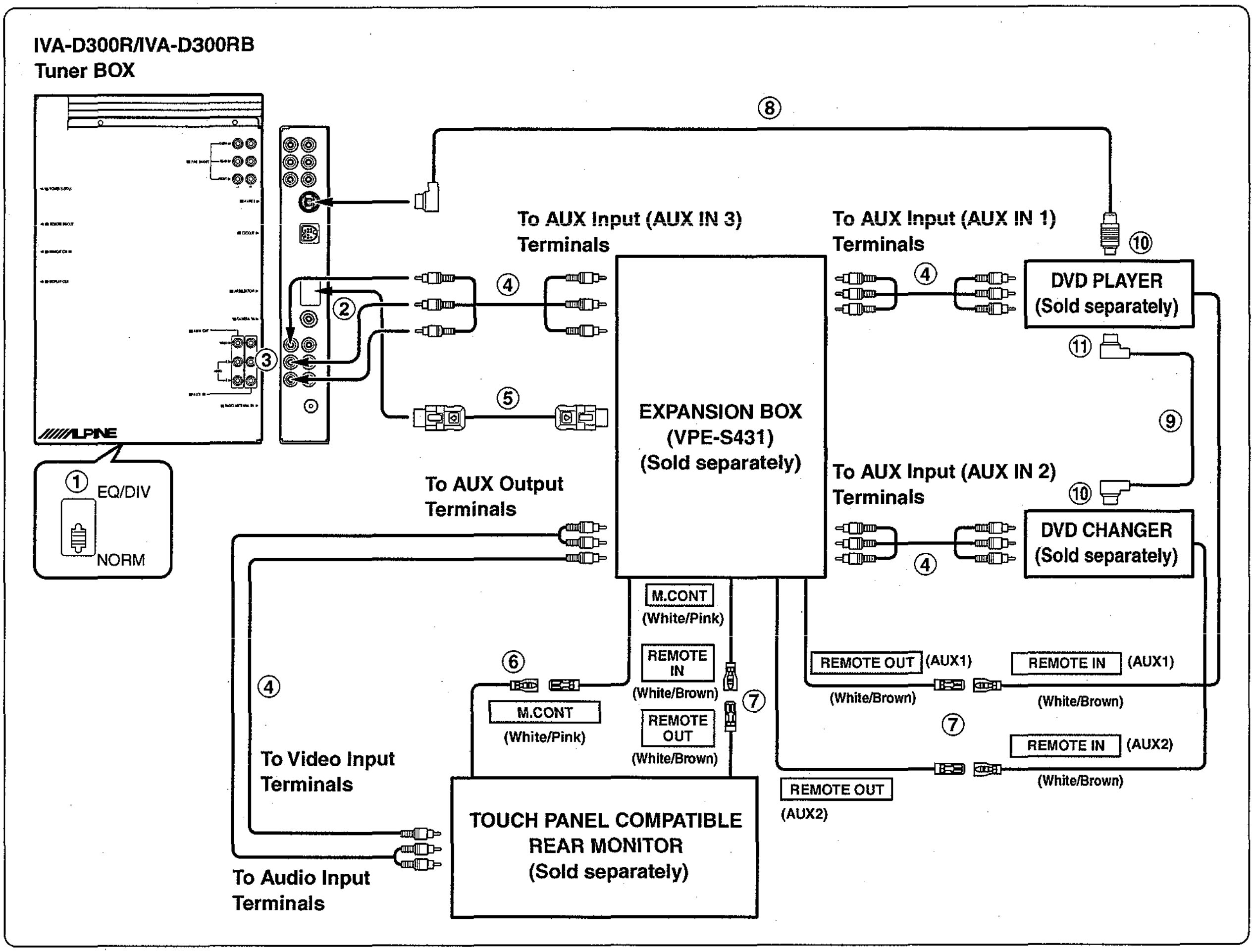
⑧ **Remote Control Input Lead (White/Brown)**

⑨ **Connect to the plus side of the car's reverse lamp which lights when the transmission is shifted into reverse (R).**
Switches the video picture to the back-up camera. This is linked to putting the car into reverse (R).

⑩ **RCA Extension Cable (Sold separately)**

TO CONTENTS

Connect an expansion box (VPE-S431), DVD Player, DVD Changer or the Touch Panel-compatible Monitor.


IVA-D300R/IVA-D300RB
Tuner BOX
ALPINE
① EQ/DIV
NORM
②
③
④
⑤
⑧
To AUX Input (AUX IN 3)
Terminals
To AUX Input (AUX IN 1)
Terminals
⑩
DVD PLAYER
(Sold separately)
⑪
⑨
EXPANSION BOX
(VPE-S431)
(Sold separately)
To AUX Output
Terminals
To AUX Input (AUX IN 2)
Terminals
⑩
DVD CHANGER
(Sold separately)
④
M.CONT
(White/Pink)
⑥
REMOTE IN
(White/Brown)
M.CONT
(White/Pink)
REMOTE OUT
(White/Brown)
⑦
REMOTE OUT (AUX1)
(White/Brown)
REMOTE IN (AUX1)
(White/Brown)
⑦
REMOTE IN (AUX2)
(White/Brown)
REMOTE OUT
(AUX2)
④
To Video Input
Terminals
To Audio Input
Terminals
TOUCH PANEL COMPATIBLE
REAR MONITOR
(Sold separately)

- If the expansion box (VPE-S431) is connected to either a DVD video player or DVD changer, connect to AUX IN 1. If it is connected to AUX IN 2, remote control operation will not be possible. If both are to be connected, connect the DVD video player to AUX IN 1, and the DVD changer to AUX IN 2.

① **System Switch**
When connecting an equalizer or divider using Ai-NET feature, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.

- *Be sure to turn the power off to the unit before changing the switch position.*

② **To AV Selector Terminal**

③ **AUX Video/Audio Output Terminal**

④ **RCA Extension Cable (Sold separately)**

⑤ **AV Selector Cable (Included with VPE-S431)**

⑥ **Monitor Control Lead (White/Pink)**
Connect this to the Monitor Control Lead of the touch panel-compatible rear monitor.

⑦ **Remote Control Output Lead (White/Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

⑧ **Ai-NET Cable (Included with DVD video player)**

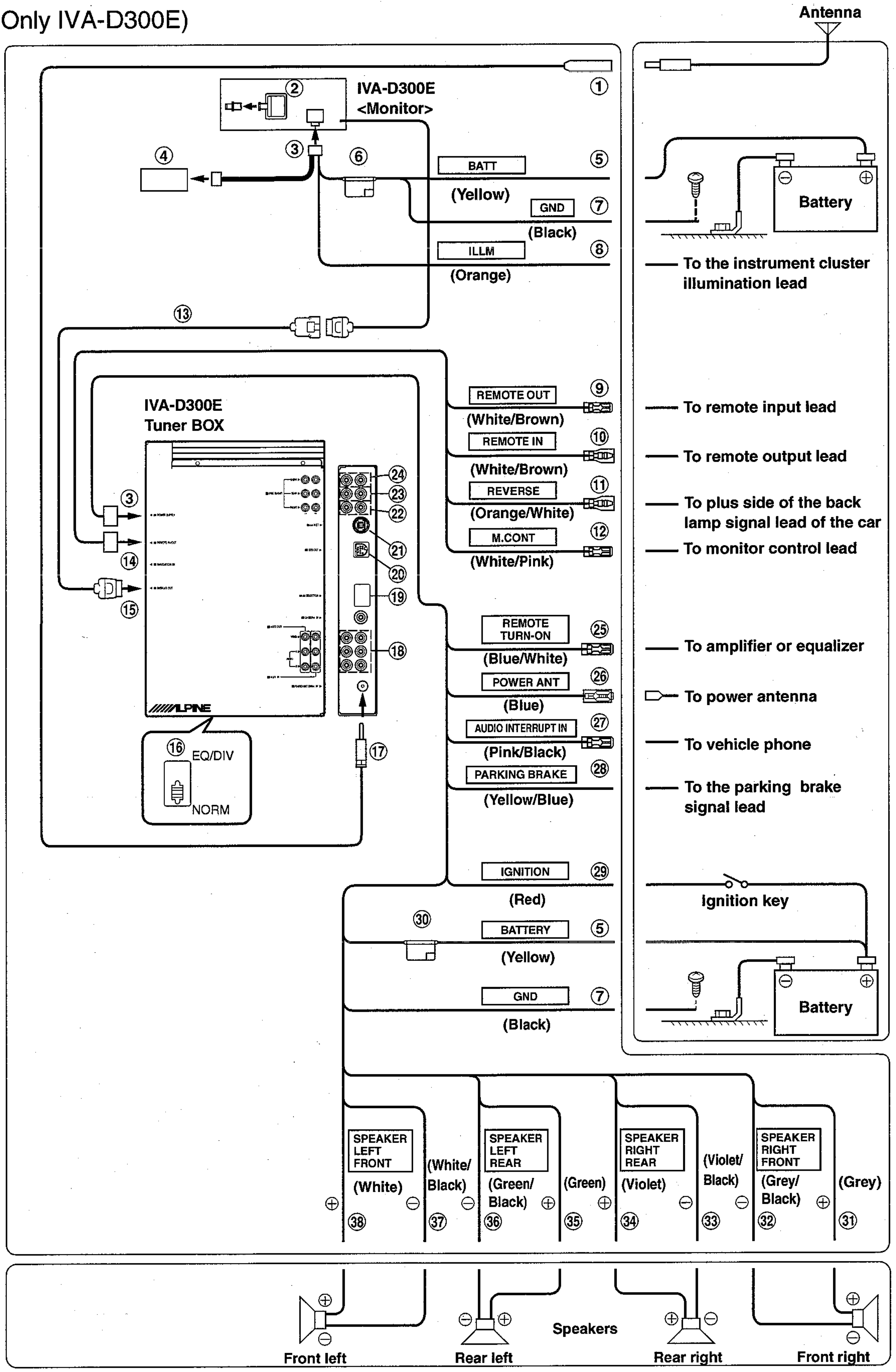
⑨ **Ai-NET Cable (Included with DVD changer)**

⑩ **To Ai-NET Connector (Black)**

⑪ **To Ai-NET Connector (Grey)**

TO CONTENTS

(Only IVA-D300E)


Antenna
①
②
③
IVA-D300E
<Monitor>
④
⑥
BATT
⑤
(Yellow)
GND
⑦
(Black)
ILLM
⑧
(Orange)
Battery
To the instrument cluster illumination lead
⑬
IVA-D300E
Tuner BOX
③
⑭
⑮
⑯
EQ/DIV
NORM
⑰
⑱
⑲
⑳
㉑
㉒
㉓
㉔
REMOTE OUT
⑨
(White/Brown)
To remote input lead
REMOTE IN
⑩
(White/Brown)
To remote output lead
REVERSE
⑪
(Orange/White)
To plus side of the back lamp signal lead of the car
M.CONT
⑫
(White/Pink)
To monitor control lead
REMOTE TURN-ON
㉕
(Blue/White)
To amplifier or equalizer
POWER ANT
㉖
(Blue)
To power antenna
AUDIO INTERRUPT IN
㉗
(Pink/Black)
To vehicle phone
PARKING BRAKE
㉘
(Yellow/Blue)
To the parking brake signal lead
IGNITION
㉙
(Red)
Ignition key
㉚
BATTERY
⑤
(Yellow)
GND
⑦
(Black)
Battery
SPEAKER LEFT FRONT
(White)
(White/ Black)
㊳
㊲
SPEAKER LEFT REAR
(Green/ Black)
(Green)
㊱
㉟
SPEAKER RIGHT REAR
(Violet)
(Violet/ Black)
㉞
㉝
SPEAKER RIGHT FRONT
(Grey/ Black)
(Grey)
㉜
㉛
Speakers
Front left
Rear left
Rear right
Front right

- *Set the system switch to "NORM" when only a changer is connected (when the Ai-NET compatible equalizer is not used).*

TO CONTENTS

① **Antenna Extension Cable**

② **Digital Output Terminal (Optical)**
Use when combining fiber digital input compatible products.

③ **Power Supply Connector**

④ **DC/DC Converter**
- *Do not install the converter at a location subjected to water such as under the floor mat or air conditioner. This may cause a malfunction.*
- *Do not bundle the DC/DC converter cable with other audio cables. Also, do not install the cables directly next to the unit. Doing so may induce noise into your system.*
- *Keep the DC/DC converter away from the Antenna cables and the rear side of the unit, otherwise noise may be generated when receiving radio broadcast.*

⑤ **Battery Lead (Yellow)**
Connect this lead to the positive (+) post of the vehicle's battery.

⑥ **Fuse Holder (10A)**

⑦ **Ground Lead (Black)**
Connect this lead to a good chassis ground on the vehicle. Make sure the connection is made to bare metal and is securely fastened using the sheet metal screw provided.

⑧ **Illumination Lead (Orange)**
This lead may be connected to the vehicle's instrument cluster illumination lead. This will allow the backlighting of the IVA-D300E to dim whenever the vehicle's lights are turned on.

⑨ **Remote Control Output Lead (White/Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

⑩ **Remote Control Input Lead (White/Brown)**
Connect the external Alpine product to the remote control output lead.

⑪ **Reverse Lead (Orange/White)**
Use only when a back-up camera is connected. Connect to the plus side of the car's reverse lamp that lights when the transmission is shifted into reverse (R).
Switches the video picture to the back-up camera. This is linked with putting the car into reverse (R).

⑫ **Monitor Control Lead (White/Pink)**
Connect this to the Monitor Control Lead of the touch panel-compatible rear monitor.

⑬ **Monitor Extension Cable (Included)**

⑭ **Remote IN/OUT Terminal**

⑮ **Display Output Terminal**

⑯ **System Switch**
When connecting an equalizer or divider using Ai-NET feature, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.
- *Be sure to turn the power off to the unit before changing the switch position.*

⑰ **Antenna Receptacle**

⑱ **AUX Input Terminals/AUX Output Terminals**
If these terminals are connected to the optional expansion box (VPE-S431), the AUX input and output terminals are not used on this unit. Connect AUX IN 1, 2 and 3, and the AUX OUT 1 and 2 terminals of the extension box (VPE-S431) to the external device(s).

⑲ **AV Select Connector**
When this connector is connected to the optional expansion box (VPE-S431), connect this to the HEAD UNIT terminal of VPE-S431.

⑳ **Ext. Output Connector**
If this connector is connected to the optional Amplifier Link compatible monaural Amplifier, connect this to the optional Amplifier Link Box, and output the Amplifier Link control signal.

㉑ **Ai-NET Connector**
Connect this to the output or input connector of other product (CD changer, Equalizer, etc.) equipped with Ai-NET.

㉒ **Front iput/output Terminal**
Use when connecting an amplifier or equalizer.

㉓ **Rear input/output Terminal**
Use when connecting an amplifier or equalizer.

㉔ **Subwoofer output Terminal**
Connect the input lead of an amplifier for the subwoofer to this terminal.

㉕ **Remote Turn-On Lead (Blue/White)**
Connect this lead to the remote turn-on lead of your amplifier or signal processor.

㉖ **To amplifier or equalizer**

㉗ **Audio Interrupt In Lead (Pink/Black)**

㉘ **Parking Brake Lead (Yellow/Blue)**
Connect this lead to the power supply side of the parking brake switch to transmit the parking brake status signals to the IVA-D300E.

㉙ **Switched Power Lead (Ignition) (Red)**
Connect this lead to an open terminal on the vehicle's fuse box or another unused power source which provides (+) 12V only when the ignition is turned on or in the accessory position.

㉚ **Fuse Holder (10A)**

㉛ **Right Front (+) Speaker Output Lead (Grey)**

㉜ **Right Front (–) Speaker Output Lead (Grey/Black)**

㉝ **Right Rear (–) Speaker Output Lead (Violet/Black)**

㉞ **Right Rear (+) Speaker Output Lead (Violet)**

㉟ **Left Rear (+) Speaker Output Lead (Green)**

㊱ **Left Rear (–) Speaker Output Lead (Green/Black)**

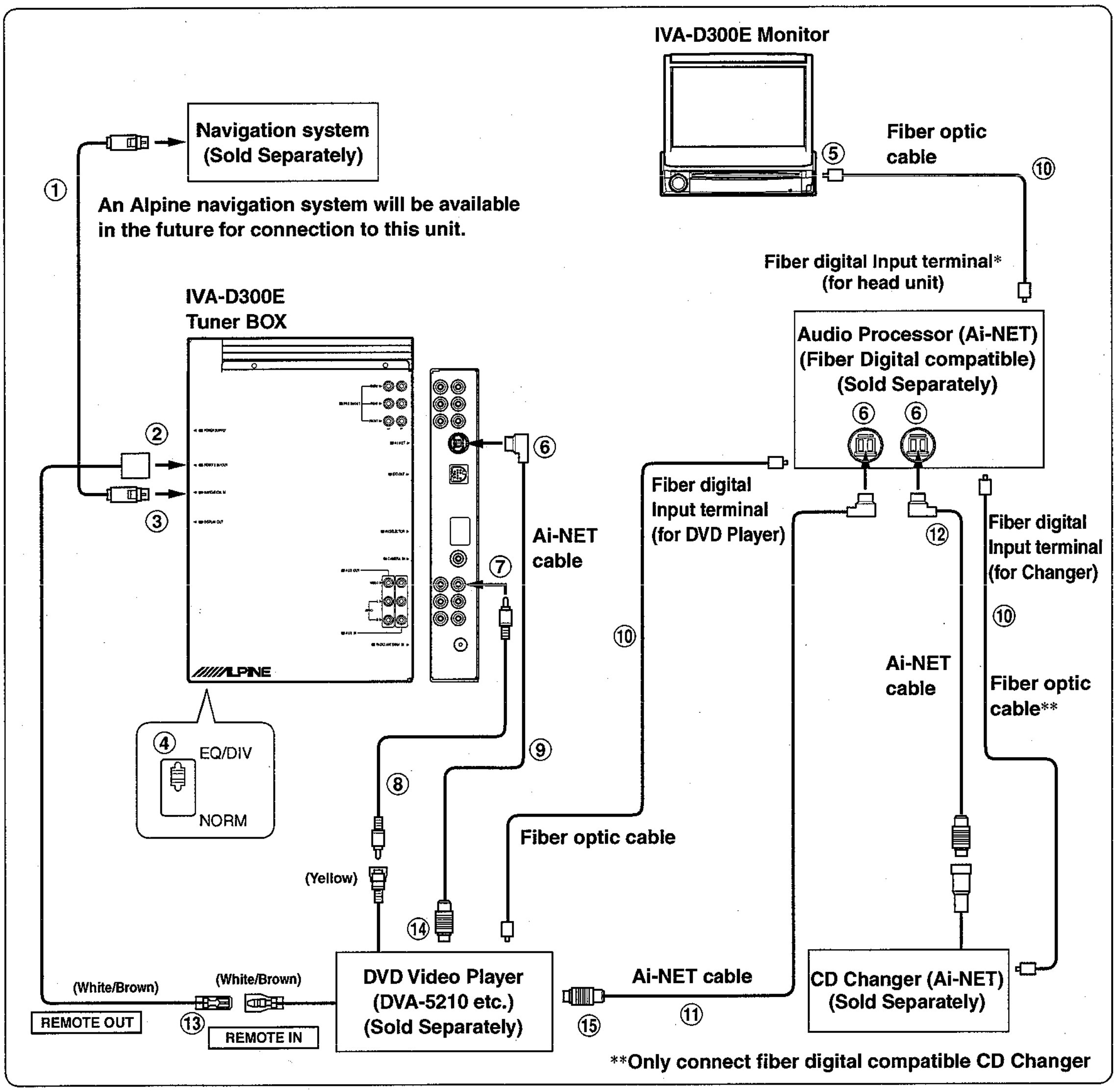
㊲ **Left Front (–) Speaker Output Lead (White/Black)**

㊳ **Left Front (+) Speaker Output Lead (White)**

TO CONTENTS

(Only IVA-D300E)

Connect the Ai-NET compatible audio processor (Fiber digital compatible), Navigation system, DVD player and changer.


IVA-D300E Monitor
Navigation system
(Sold Separately)
①
An Alpine navigation system will be available in the future for connection to this unit.
Fiber optic cable
⑤
⑩
Fiber digital Input terminal*
(for head unit)
IVA-D300E
Tuner BOX
Audio Processor (Ai-NET)
(Fiber Digital compatible)
(Sold Separately)
⑥ ⑥
②
⑥
③
Fiber digital
Input terminal
(for DVD Player)
Fiber digital
Input terminal
(for Changer)
⑫
Ai-NET
cable
⑦
⑩
⑩
ALPINE
Ai-NET
cable
Fiber optic
cable**
④
EQ/DIV
NORM
⑨
⑧
Fiber optic cable
(Yellow)
⑭
(White/Brown)
(White/Brown)
DVD Video Player
(DVA-5210 etc.)
(Sold Separately)
Ai-NET cable
CD Changer (Ai-NET)
(Sold Separately)
REMOTE OUT
⑬
REMOTE IN
⑮
⑪

**Only connect fiber digital compatible CD Changer

- *When the fiber digital compatible product is connected, it is necessary to set the mode of this unit. Refer to "Setting the Digital Output" and set to ON. Then refer to "Optical Digital Input Selection for an External Audio Processor" and switch the setting.*
- ** When connecting with PXA-H510 :*
  - *Connect the fiber digital input terminal to the DVD.*
  - *IVA-D300E and DVA-5205E or DVA-5210 cannot be connected simultaneously when fiber digital is in use.*

Please observe the following when using Fiber Optic Cable.

- *Do not coil the Fiber Optic Cable smaller than a 30 mm radius.*
- *Do not place anything on top of the Fiber Optic Cable.*

TO CONTENTS

① **RGB Cable (Included with Navigation)**

② **Remote IN/OUT Terminal**

③ **RGB Input Terminal**
Connect this to the RGB output terminal of the Navigation System.

④ **System Switch**
When connecting an equalizer or divider using Ai-NET feature, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.

- *Be sure to turn the power off to the unit before changing the switch position.*

⑤ **Digital Output Terminal**

⑥ **Ai-NET Connector**
Connect this to the output or input connector of other product equipped with Ai-NET.

⑦ **AUX Video Input Terminal**
Connect the video output lead of a DVD video player or DVD changer to this terminal.

⑧ **RCA Extension Cable (Included with DVD video player)**

⑨ **Ai-NET Cable (Included with DVD video player)**

⑩ **Fiber optic Cable (Sold Separately)**

⑪ **Ai-NET Cable (Included with Audio processor)**

⑫ **Ai-NET Cable (Included with CD Changer)**

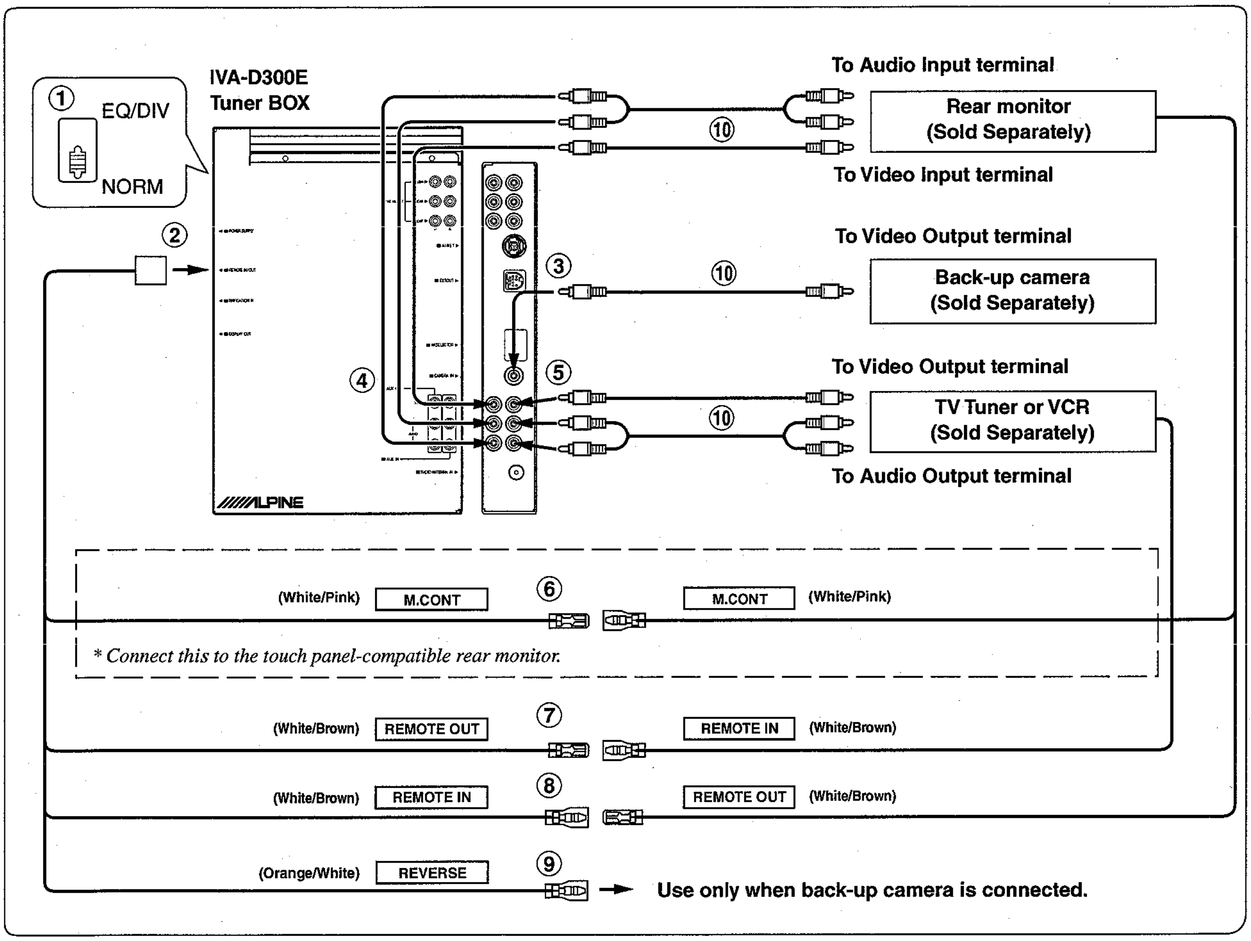
⑬ **Remote Control Output Lead (White/Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

⑭ **To Ai-NET Connector (Grey)**

⑮ **To Ai-NET Connector (Black)**

TO CONTENTS

(Only IVA-D300E)


①
EQ/DIV
NORM
IVA-D300E
Tuner BOX
②
③
④
⑤
To Audio Input terminal
Rear monitor
(Sold Separately)
To Video Input terminal
⑩
To Video Output terminal
Back-up camera
(Sold Separately)
⑩
To Video Output terminal
TV Tuner or VCR
(Sold Separately)
⑩
To Audio Output terminal
ALPINE
(White/Pink) M.CONT
⑥
M.CONT (White/Pink)
* Connect this to the touch panel-compatible rear monitor.
(White/Brown) REMOTE OUT
⑦
REMOTE IN (White/Brown)
(White/Brown) REMOTE IN
⑧
REMOTE OUT (White/Brown)
(Orange/White) REVERSE
⑨
Use only when back-up camera is connected.

① **System Switch**
When connecting an equalizer or divider using Ai-NET feature, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.

- *Be sure to turn the power off to the unit before changing the switch position.*

② **Remote IN/OUT Terminal**

③ **CAMERA Input Terminal**
Use when connecting a back-up camera.

④ **AUX Video/Audio Output Terminal**
Use when connecting an optional monitor etc.

⑤ **AUX Video/Audio Input Terminal**

⑥ **Monitor Control Lead (White/Pink)**
Connect this to the Monitor Control Lead of the touch panel-compatible rear monitor.

⑦ **Remote Control Output Lead (White/Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

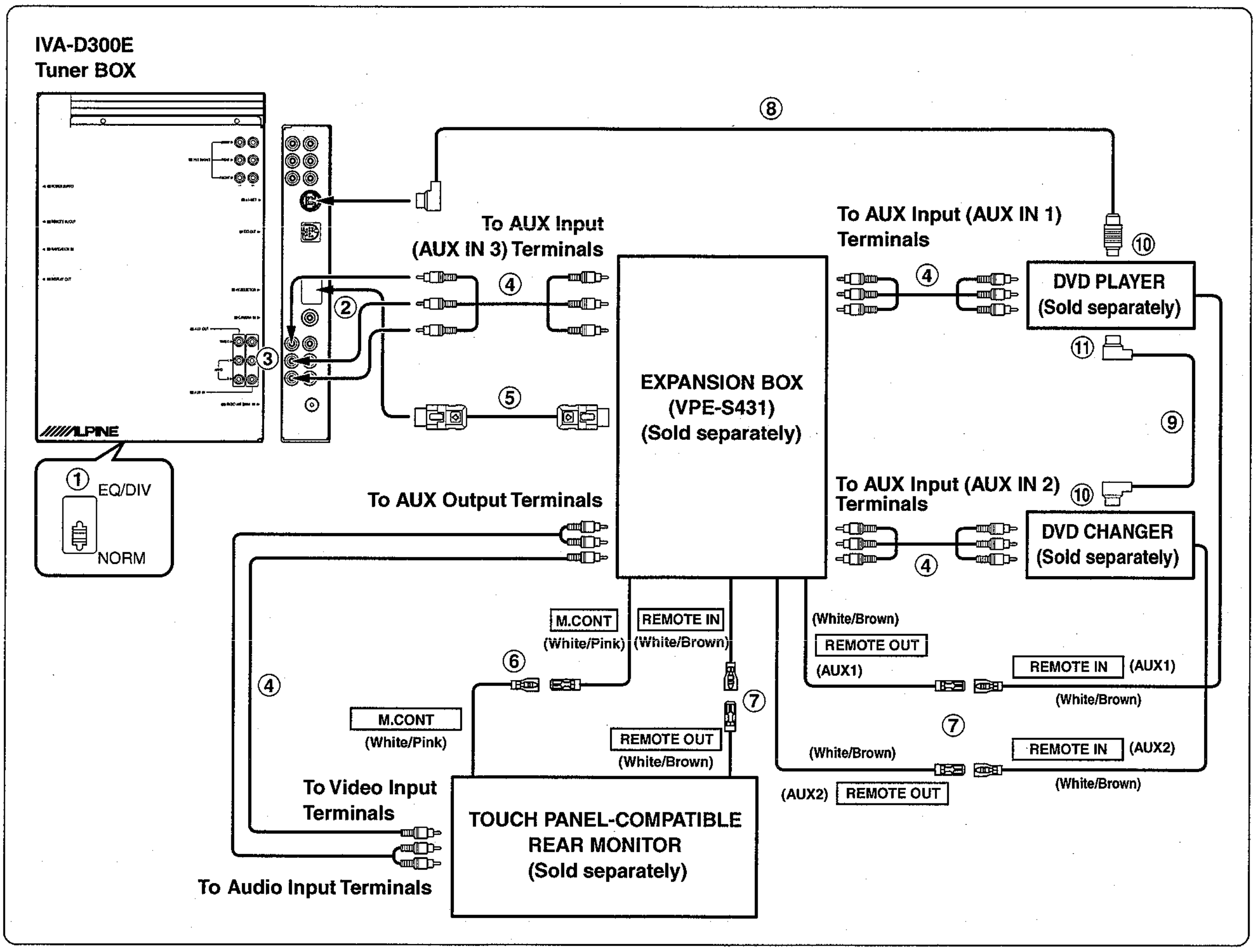
⑧ **Remote Control Input Lead (White/Brown)**

⑨ **Connect to the plus side of the car's reverse lamp which lights when the transmission is shifted into reverse (R).**
Switches the video picture to the back-up camera. This is linked to putting the car into reverse (R).

⑩ **RCA Extension Cable (Sold separately)**

TO CONTENTS

Connect an expansion box (VPE-S431), DVD Player, DVD Changer or the Touch Panel-compatible Monitor.


IVA-D300E
Tuner BOX
ALPINE
① EQ/DIV
NORM
②
③
⑧
To AUX Input
(AUX IN 3) Terminals
④
⑤
To AUX Output Terminals
EXPANSION BOX
(VPE-S431)
(Sold separately)
To AUX Input (AUX IN 1)
Terminals
⑩
DVD PLAYER
(Sold separately)
⑪
⑨
To AUX Input (AUX IN 2)
Terminals
DVD CHANGER
(Sold separately)
M.CONT
(White/Pink)
REMOTE IN
(White/Brown)
⑥
⑦
M.CONT
(White/Pink)
REMOTE OUT
(White/Brown)
To Video Input
Terminals
To Audio Input Terminals
TOUCH PANEL-COMPATIBLE
REAR MONITOR
(Sold separately)
(White/Brown)
REMOTE OUT
(AUX1)
REMOTE IN
(AUX1)
(White/Brown)
(White/Brown)
REMOTE IN
(AUX2)
(AUX2)
REMOTE OUT
(White/Brown)

- If the expansion box (VPE-S431) is connected to either a DVD video player or DVD changer, connect this to AUX IN 1. If this is connected to AUX IN 2, remote control operation will not be possible. If both are to be connected, connect the DVD video player to AUX IN 1, and the DVD changer to AUX IN 2.

① **System Switch**
When connecting an equalizer or divider using Ai-NET feature, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.

- *Be sure to turn the power off to the unit before changing the switch position.*

② **To AV Selector Terminal**

③ **AUX Video/Audio Output Terminal**

④ **RCA Extension Cable (Sold separately)**

⑤ **AV Selector Cable (Included with VPE-S431)**

⑥ **Monitor Control Lead (White/Pink)**
Connect this to the Monitor Control Lead of the touch panel-compatible rear monitor.

⑦ **Remote Control Output Lead (White/Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

⑧ **Ai-NET Cable (Included with DVD video player)**

⑨ **Ai-NET Cable (Included with DVD changer)**

⑩ **To Ai-NET Connector (Black)**

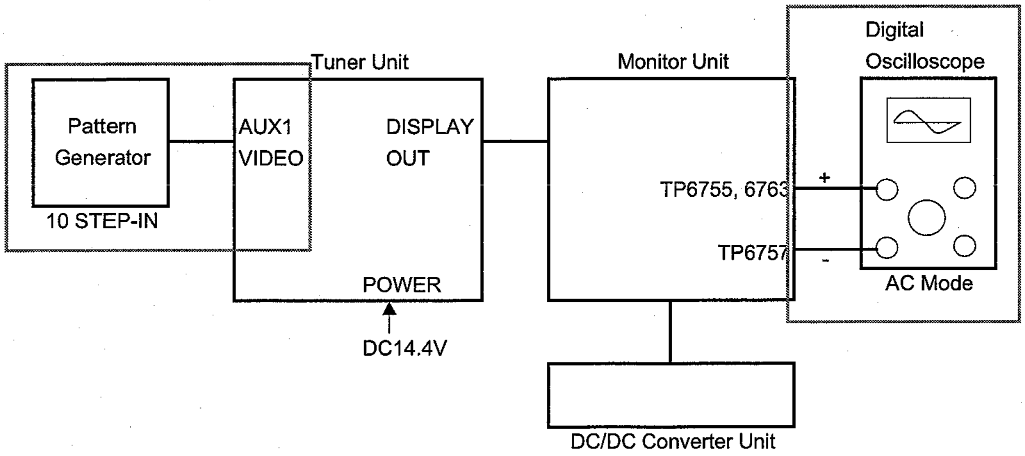
⑪ **To Ai-NET Connector (Grey)**

TO CONTENTS

Adjustment Procedures

1. VIDEO Adjustment

(1) Connections


Tuner Unit
Pattern Generator
10 STEP-IN
AUX1
VIDEO
DISPLAY
OUT
POWER
DC14.4V
Monitor Unit
TP6755, 6763
TP6757
+
-
Digital
Oscilloscope
AC Mode
DC/DC Converter Unit

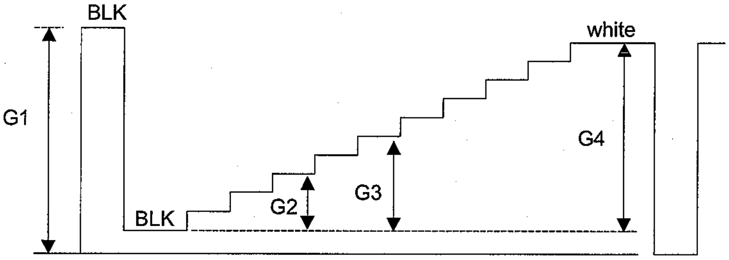
<Figure 1>

(2) Adjustment

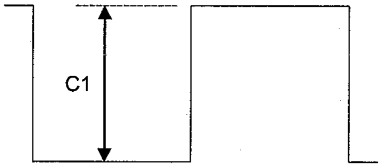
Step		Operations Process	Test Point/ P.W.Board Coordinates	Adjustment
1	(1)	Setup DIAG Mode (only RADIO Mode)		
	-1	Push long "P1/2"or "P2/2" KEY.		
	-2	Next, push "MUTEL" KEY.		
	-3	Next, push "V.SEL" KEY.		
	-4	Next, push "BAND" KEY.		
	(2)	Select "VIDEO CHK" by pushing "P.SET3" KEY at DIAG Mode.		
	(3)	Select "P.SET4 KEY at VIDEO CHK Mode.		
2	-1	Brightness Adjustment	TP6755 (4-F) TP6757 (4-F)	-1. Select "Brightness Adjustment mode" by pushing "P.SET3" or "P.SET4 KEY. -2. Adjust to 3.5Vp-p{G1} by pushing "P.SET1" UP KEY or "P.SET2" DOWN KEY. (Refer to Figure-2-1) -3. Push "P.SET7" RETURN KEY.
	-2	Contrast Adjustment	TP6755 (4-F) TP6757 (4-F)	-1. Select "Contrast Adjustment mode" by pushing "P.SET3" or "P.SET4 KEY. -2. Adjust to 1.6V{G2} by pushing "P.SET1" UP KEY or "P.SET2" DOWN KEY. (Refer to Figure-2-1) -3. Push "P.SET7" RETURN KEY.
	-3	GANNMA1 Adjustment	TP6755 (4-F) TP6757 (4-F)	-1. Select "GANNMA1 Adjustment mode" by pushing "P.SET3" or "P.SET4 KEY. -2. Adjust to 2.1V{G3} by pushing "P.SET1" UP KEY or "P.SET2" DOWN KEY. (Refer to Figure-2-1) -3. Push "P.SET7" RETURN KEY.

TO CONTENTS

Step		Operations Process	Test Point/ P.W.Board Coordinates	Adjustment
2	-4	GANNMA2 Adjustment	TP6755 (4-F) TP6757 (4-F)	-1. Select "GANNMA2 Adjustment mode" by pushing "P.SET3" or "P.SET4 KEY. -2. Adjust to 3.1V{G4} by pushing "P.SET1" UP KEY or "P.SET2" DOWN KEY. (Refer to Figure-2-1) -3. Push "P.SET7" RETURN KEY.
3		COM AMP Adjustment	TP6757 (4-F) TP6763 (4-F)	-1. Select "COM AMP Adjustment mode" by pushing "P.SET3" or "P.SET4 KEY. -2. Adjust to 6Vp-p{C1} by pushing "P.SET1" UP KEY or "P.SET2" DOWN KEY. (Refer to Figure-2-2) -3. Push "P.SET7" RETURN KEY.
4		COM CENT Adjustment	-	-1. Select "COM CENT Adjustment mode" by pushing "P.SET3" or "P.SET4 KEY. -2. Adjust to fritter may become the minimum by pushing "P.SET1" UP KEY or "P.SET2" DOWN KEY. -3. Push "P.SET7" RETURN KEY.
5		Finish VIDEO CHK Mode by pushing "P.SET7" RETURN KEY.		
6		Finish DIAG Mode by pushing "P.SET8" RETURN KEY.		



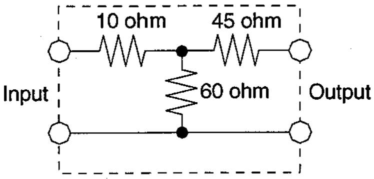
<Figure-2-1>



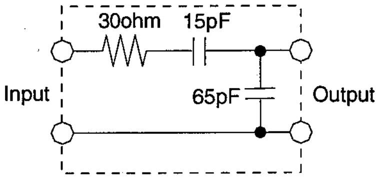
<Figure-2-2>

2. FM/AM Tuner Adjustment

(1) Dummy Antenna Circuit

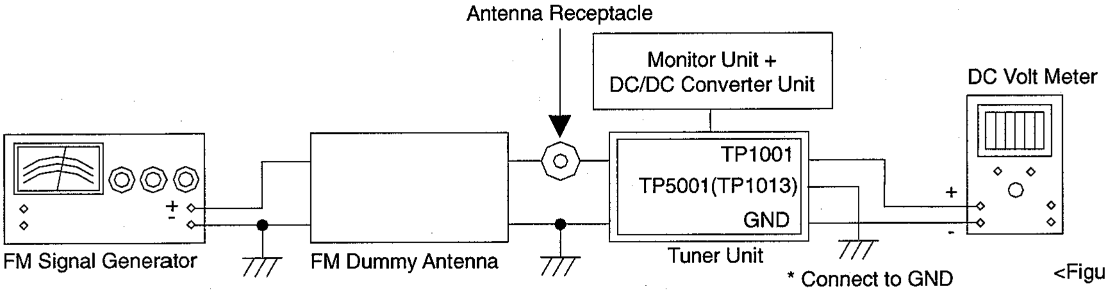

10 ohm
45 ohm
60 ohm
Input
Output

For 50 ohm FM Signal Generator <Figure 3>


30ohm
15pF
65pF
Input
Output

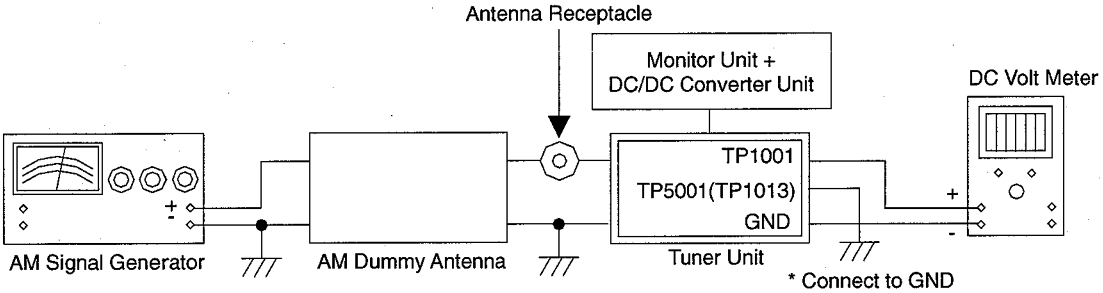
For 50 ohm AM Signal Generator <Figure 4>

(2) Connections


Antenna Receptacle
Monitor Unit +
DC/DC Converter Unit
DC Volt Meter
TP1001
TP5001(TP1013)
GND
+
-
FM Signal Generator
FM Dummy Antenna
Tuner Unit

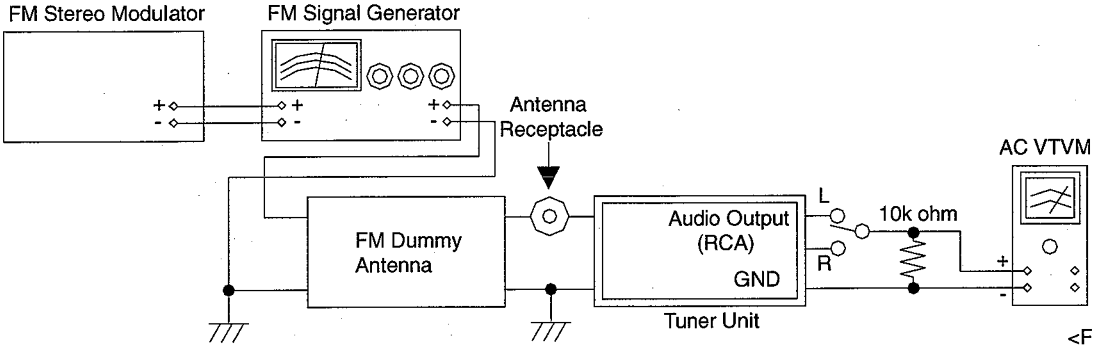
* Connect to GND for 4 to 5 sec.

<Figure 5>

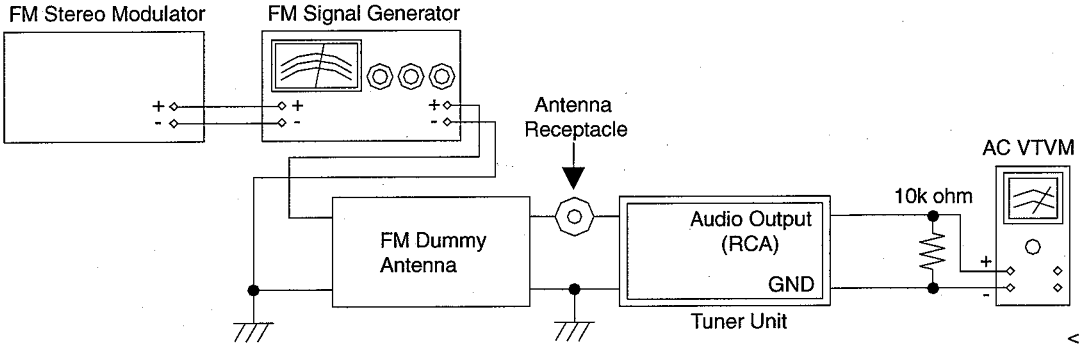

Antenna Receptacle
Monitor Unit +
DC/DC Converter Unit
DC Volt Meter
TP1001
TP5001(TP1013)
GND
+
-
AM Signal Generator
AM Dummy Antenna
Tuner Unit

* Connect to GND for 4 to 5 sec.

<Figure 6>


FM Stereo Modulator
FM Signal Generator
+
-
Antenna
Receptacle
AC VTVM
FM Dummy
Antenna
Audio Output
(RCA)
GND
L
R
10k ohm
Tuner Unit

<Figure 7>


FM Stereo Modulator
FM Signal Generator
+
-
Antenna
Receptacle
AC VTVM
FM Dummy
Antenna
Audio Output
(RCA)
GND
10k ohm
Tuner Unit

<Figure 8>

TO CONTENTS

(3) Control Settings

Power Switch	ON	Band Switch	FM/AM
Fader Control	Center Position	MX Effect	OFF
Balance Control	Center Position	T-CORR Effect	OFF
Treble Control	Center Position	Others	OFF
Bass Control	Center Position		

(4) Adjustment Procedures

Step	Description	Connection	Signal Generator	Dial Control	Test Point / P.W.Board Coordinates	Adjustment
1	FM S-METER Adjustment	Figure 5	87.5MHz (Input 26dBu, Mod. OFF)	87.5MHz	TP1001 (4-G) TP1013 (1-F) (#1,$1) TP5001 (1-F) (%1,&1)	<Auto adjustment> 1. Select FM Mode. 2. Connect to TP1013(#1,$1) ...{TP5001(%1,&1)} and GND for ...4 to 5 sec. (NOTE : Perform the auto adjustment by decreasing input level between 3 and 5dBu, and then perform the auto adjustment again with input level 26dBu. In this ase make sure output at TP1001 shows 1.5±0.1V.)
2	AM(MW) S-METER Adjustment	Figure 6	999kHz(#1,$1), 1,000kHz(%1,&1), (Input 34dBu, Mod. OFF)	999kHz (#1,$1), 1,000kHz (%1,&1)	TP1001 (4-G) TP1013 (1-F) (#1,$1) TP5001 (1-F) (%1,&1)	<Auto adjustment> 1. Select AM Mode. 2. Connect to TP1013(#1,$1) ...{TP5001(%1,&1)} and GND for ...4 to 5 sec. (NOTE : Perform the auto adjustment by decreasing input level between 3 and 5dBu, and then perform the auto adjustment again with input level 34dBu. In this ase make sure output at TP1001 shows 1±0.1V.)
3	(#1,$1) LW S-METER Adjustment	Figure 6	216kHz (Input 34dBu, Mod. OFF)	216kHz	TP1001 (4-G) TP1013 (1-F) (#1,$1) TP5001 (1-F) (%1,&1)	<Auto adjustment> 1. Select AM Mode. 2. Connect to TP1013(#1,$1) ...{TP5001(%1,&1)} and GND for ...4 to 5 sec. (NOTE : Perform the auto adjustment by decreasing input level between 3 and 5dBu, and then perform the auto adjustment again with input level 34dBu. In this ase make sure output at TP1001 shows 1±0.1V.)

NOTE: #1 : For IVA-D300R (Region Number 2) Only, $1 : For IVA-D300RB (Region Number 2) Only,
%1 : For IVA-D300E (Region Number 3) Only, %1 : For IVA-D300E (Region Number 4) Only,
Others : Common.

TO CONTENTS

Step	Description	Connection	Signal Generator		Dial Control	Test Point / P.W.Board Coordinates	Adjustment
4	FM ST Separation (Roll OFF) Adjustment	Figure 7	(1)	—	—	—	Select RADIO Mode
			(2)	—	—	—	Set up of DIAG Mode : Push P1/2 or P2/2 at the long time. Next, push MUTE. Next, push V.SEL. Next, push BAND.
			(3)	—	—	—	Set up of CLEAR Mode : Push P.SET4.
			(4)	—	—	—	Set up of ROLL OFF Mode : Push P.SET6.
			(5)	98.1MHz, 72dBμ (Mod. 400Hz, Dev. 75kHz, Stereo, 1kHz, Lch only)	98.1MHz	Audio Output (RCA)	Push Preset Switches (P.SET1~P.SET5), and observe value of separation. Select Preset Switch of maximum separation. (SPEC) : more than 20dB(#1,$1). (SPEC) : more than 25dB(%1,&1).
			(6)	—	—	—	Cancel Adjustment Mode : Push P.SET7.
5	Stereo Blend Adjustment (Lch)	Figure 7	(1)	—	—	—	Select RADIO Mode
			(2)	—	—	—	Set up of DIAG Mode : Push P1/2 or P2/2 at the long time. Next, push MUTE. Next, push V.SEL. Next, push BAND.
			(3)	—	—	—	Set up of CLEAR Mode : Push P.SET4.
			(4)	—	—	—	Set up of ROLL OFF Mode : Push P.SET6.
			(5)	98.1MHz, 46dBμ (Mod. 400Hz, Dev. 75kHz, Stereo, 1kHz, Lch only)	98.1MHz	Audio Output (RCA)	Push Preset Switches (1~6), and observe value of blend. (SPEC) : Blend : 8±6dB.
			(6)	—	—	—	Cancel Adjustment Mode : Push P.SET7.

NOTE: #1 : For IVA-D300R (Region Number 2) Only, $1 : For IVA-D300RB (Region Number 2) Only, %1 : For IVA-D300E (Region Number 3) Only, %1 : For IVA-D300E (Region Number 4) Only, Others : Common.

TO CONTENTS

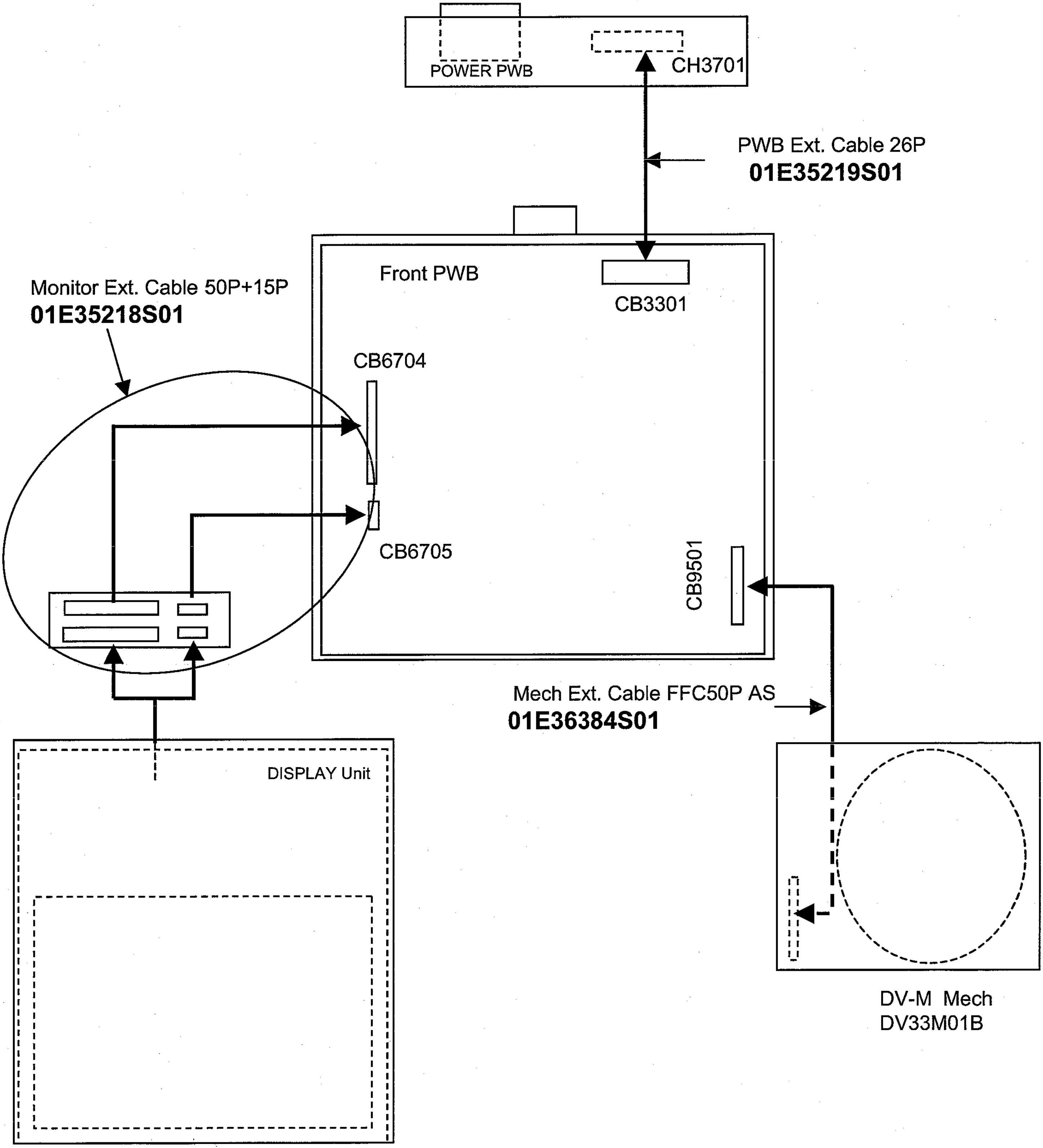
Step	Description	Connection	Signal Generator		Dial Control	Test Point / P.W.Board Coordinates	Adjustment
6	Limitting Adjustment	Figure 8	(1)	—	—	—	Select RADIO Mode
			(2)	—	—	—	Set up of DIAG Mode : Push P1/2 or P2/2 at the long time. Next, push MUTE. Next, push V.SEL. Next, push BAND.
			(3)	—	—	—	Set up of CLEAR Mode : Push P.SET4.
			(4)	—	—	—	Set up of Adjustment Mode : Push SOURCE/POWER + UP at the same time.
			(5)	98.1MHz, 24dBμ (Mod. 400Hz, Dev. 75kHz)	98.1MHz	Audio Output (RCA)	Push Preset Switches (1~5), and observe value of limitting. (SPEC) : Limitting : -3dB.
			(6)	—	—	—	Cancel Adjustment Mode : Push P.SET7.

NOTE : For the Test Points and Ajustment parts, refer to the Parts Layout on P.W.Boards and Wiring Diagram.

TO CONTENTS

Extension Cable

* When repairing or measuring the voltage of this unit, connect with the Extension Cable as shown in below.


POWER PWB
CH3701
PWB Ext. Cable 26P
01E35219S01
Monitor Ext. Cable 50P+15P
01E35218S01
Front PWB
CB3301
CB6704
CB6705
CB9501
Mech Ext. Cable FFC50P AS
01E36384S01
DISPLAY Unit
DV-M Mech
DV33M01B

* Monitor Unit Block

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About LCD panel change 80
Exploded View (DVD Deck Mechanism) (DV33M01B) 81

NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

TO CONTENTS

Specifications

<Monitor SECTION>

Screen Size	"7" type
Display System	Transparent type TN LCD
Drive System	TFT active matrix
Number of Picture Elements	336,960 pcs. (1,440 x 234)
Light Source	Cold cathode fluorescent tube

<CD/DVD SECTION>

System	Optical (DVD System)

(CD AUDIO)

Channel Balance (1kHz, TCD-782)	0±3dB
Distortion (1kHz, TCD-782)	0.3%
Frequency Response (Ref. 1kHz, TCD-782)	17Hz : 0±4dB 127Hz : 0±2dB 10.007kHz : 0±2dB 19.997kHz : -2±4dB
S/N Ratio (TCD-782)	80dB
Separation (1kHz, TCD-782)	65dB
De-Emphasis (Ref. 1kHz, TCD-782)	4kHz : -20±3dB 16kHz : -20±3dB

(MP-3 AUDIO)

Channel Balance (1kHz, SCD-4419 (128kbps))	0±3dB
Distortion (1kHz, SCD-4419 (128kbps))	0.3%
Frequency Response (Ref. 1kHz, SCD-4419 (128kbps))	17Hz : 0±4dB 127Hz : 0±2dB 10.007kHz : 0±2dB 19.997kHz : -2±4dB
S/N Ratio (SCD-4419 (128kbps))	80dB
Separation (1kHz, SCD-4419 (128kbps))	65dB

(WMA AUDIO)

Channel Balance (1kHz, SCD-5100 (128kbps))	0±3dB
Distortion (1kHz, SCD-5100 (128kbps))	0.3%
Frequency Response (Ref. 1kHz, SCD-5100 (128kbps))	17Hz : 0±4dB 127Hz : 0±2dB 10.007kHz : 0±2dB 19.997kHz : -2±4dB
S/N Ratio (SCD-5100 (128kbps))	80dB
Separation (1kHz, SCD-5100 (128kbps))	65dB

(DVD-VIDEO)

***AUDIO PRE-OUT** : Title Number 4/Audio Stream 2/LPCM 48k<NTSC>

Channel Balance (1kHz, TDV-540A)	0±3dB
Distortion (1kHz, TDV-540A)	0.3%
Frequency Response (Ref. 1kHz, TDV-540A)	17Hz : 0±4dB 127Hz : 0±2dB 10.007kHz : 0±2dB 19.997kHz : -2±4dB
S/N Ratio (TDV-540A)	80dB
Separation (1kHz, TDV-540A)	65dB

TO CONTENTS

***VIDEO AUX OUT1** : PAL, Terminating Resistance 75 ohm

Luminance Level (JVC V-509)	1±0.15V
Luminance Frequency Response (4.7MHz, JVC V-509)	-2±2dB
Luminance Signal S/N Ratio (JVC V-509)	50dB

***AUDIO AUX-OUT** : 10K ohm Resistive Load, Title Number 4/Audio Stream 3/LPCM 96k<NTSC>

Output Level (1kHz, TDV-540A)	1.2±0.2Vrms
Channel Balance (1kHz, TDV-540A)	0±3dB
Distortion (1kHz, TDV-540A)	0.3%
Frequency Response (Ref. 1kHz, TDV-540A)	17Hz : -3±3dB 127Hz : 0±2dB 19.997kHz :-2±2dB
S/N Ratio (TDV-540A)	80dB
Separation (1kHz, TDV-540A)	65dB

(VIDEO-CD)

***AUDIO** : MPEG AUDIO<NTSC>

Channel Balance (1kHz, TVD-581A)	0±3dB
Distortion (1kHz, TVD-581A)	0.3%
Frequency Response (Ref. 1kHz, TVD-581A)	21Hz : 0±4dB 127Hz : 0±2dB 10.007kHz : 0±2dB 19.997kHz : -2±4dB
S/N Ratio (TVD-581A)	80dB
Separation (1kHz, TVD-581A)	65dB

***VIDEO** : PAL, Terminating Resistance 75 ohm

Luminance Level (HLV-402)	1±0.15V
Luminance Frequency Response (2MHz, HLV-402)	-2±2dB
Luminance Signal S/N Ratio (HLV-402)	45dB

<Pickup>

Wave Length	DVD : 665nm CD : 800nm
Laser Power	CLASS II

<GENERAL>

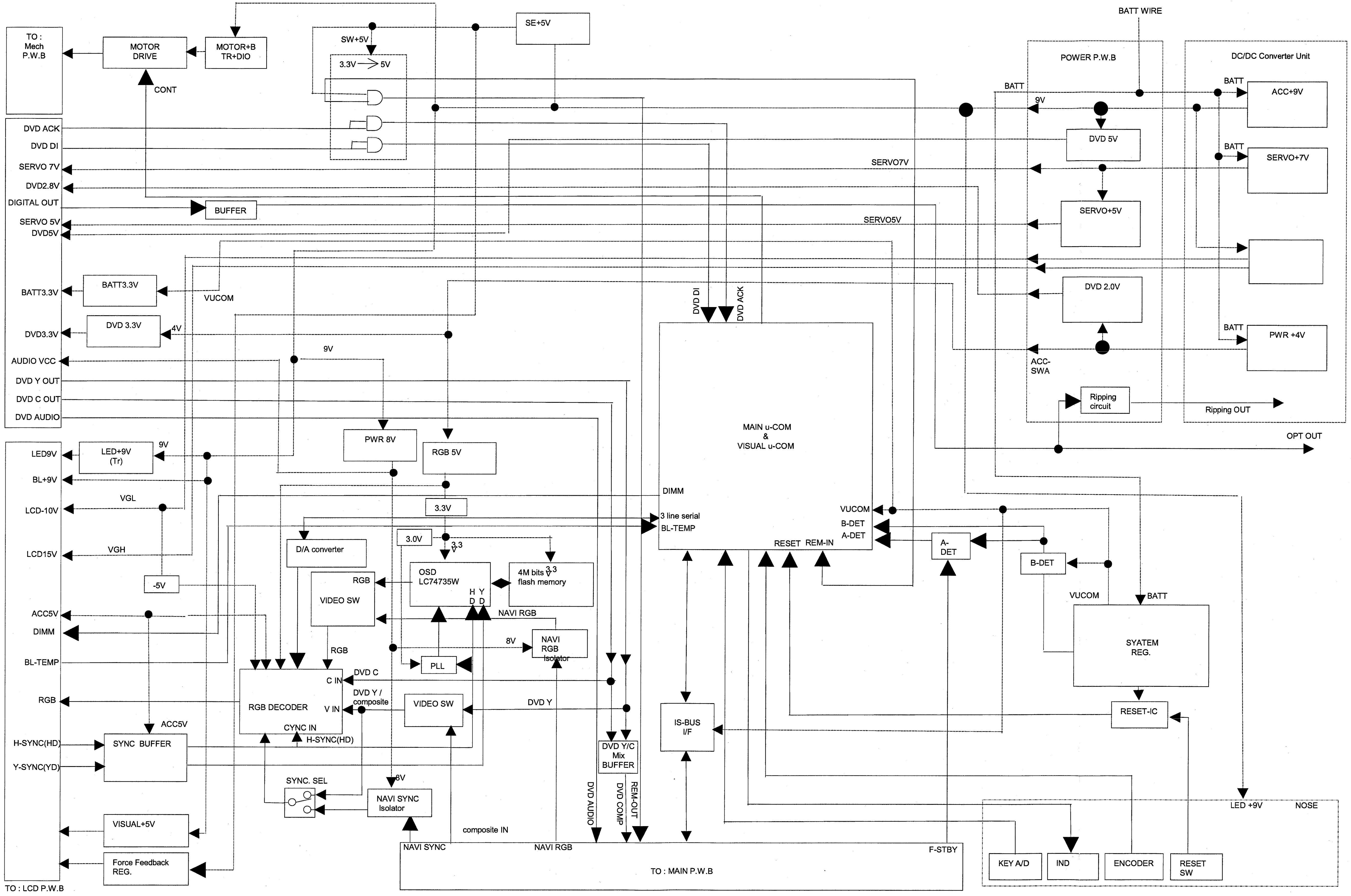
Power Supply	DC14.4V
Dimensions (W x H x D)	Chassis : 178 x 50 x 165mm Nose : 170 x 47.3 x 39.7mm
Weight	2.1kg

NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.

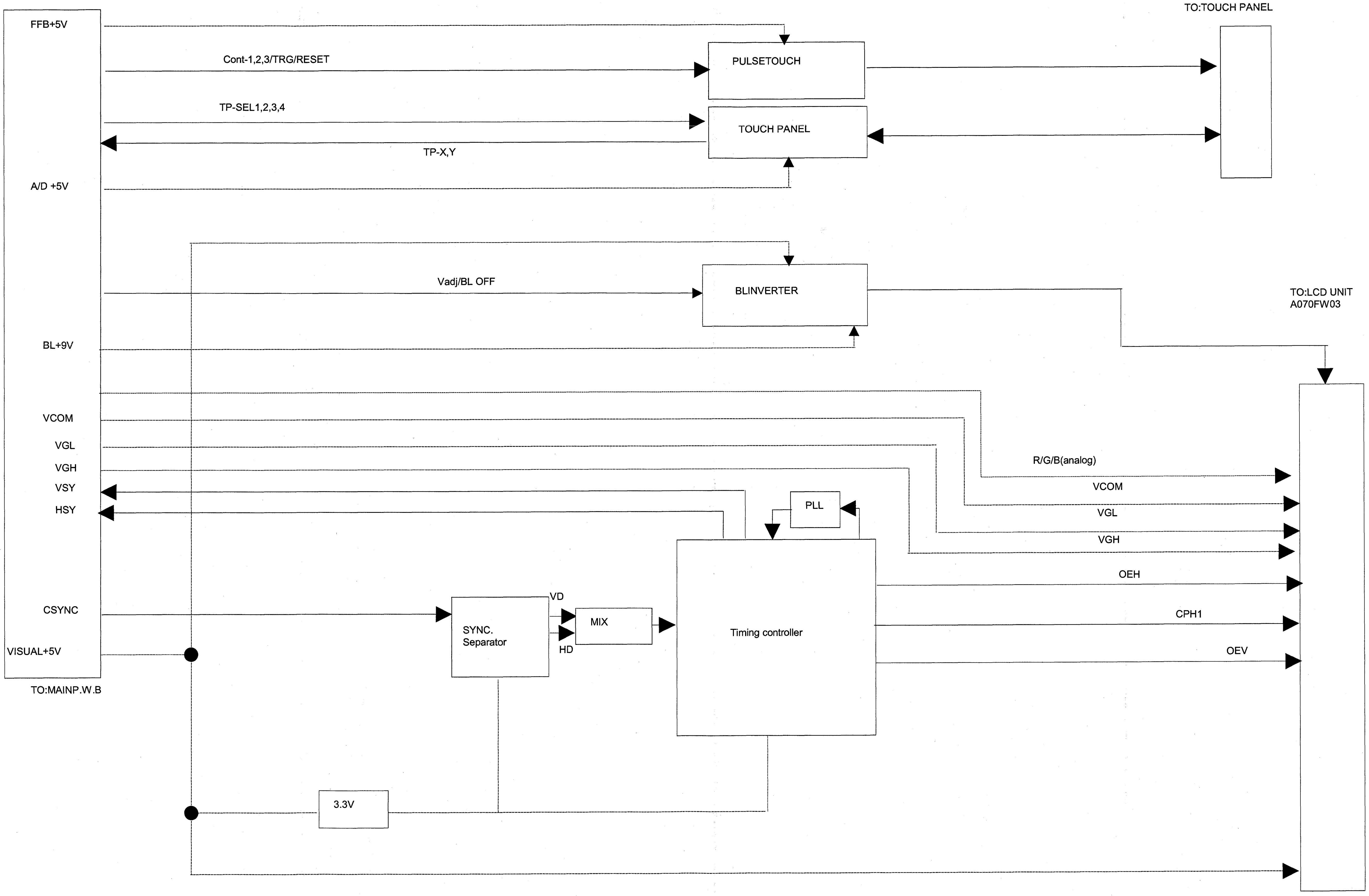
TO CONTENTS

Block Diagram

< FRONT,DC/DC PWB >


TO : Mech P.W.B
MOTOR DRIVE
MOTOR+B TR+DIO
CONT
SW+5V
3.3V → 5V
SE+5V
BATT WIRE
POWER P.W.B
DC/DC Converter Unit
BATT
9V
ACC+9V
DVD 5V
SERVO+7V
SERVO7V
SERVO+5V
SERVO5V
DVD 2.0V
PWR +4V
ACC-SWA
Ripping circuit
Ripping OUT
OPT OUT
DVD ACK
DVD DI
SERVO 7V
DVD2.8V
DIGITAL OUT
BUFFER
SERVO 5V
DVD5V
BATT3.3V
VUCOM
DVD 3.3V
4V
DVD3.3V
AUDIO VCC
DVD Y OUT
DVD C OUT
DVD AUDIO
PWR 8V
RGB 5V
MAIN u-COM & VISUAL u-COM
DIMM
3 line serial
BL-TEMP
VUCOM
B-DET
A-DET
RESET
REM-IN
A-DET
B-DET
SYATEM REG.
RESET-IC
LED9V
LED+9V (Tr)
BL+9V
VGL
LCD-10V
LCD15V
VGH
-5V
ACC5V
DIMM
BL-TEMP
RGB
H-SYNC(HD)
Y-SYNC(YD)
SYNC BUFFER
VISUAL+5V
Force Feedback REG.
TO : LCD P.W.B
3.3V
3.0V
D/A converter
OSD LC74735W
4M bits flash memory
VIDEO SW
NAVI RGB
NAVI RGB Isolator
8V
PLL
RGB DECODER
C IN
V IN
CYNC IN
DVD C
DVD Y / composite
VIDEO SW
DVD Y
SYNC. SEL
NAVI SYNC Isolator
DVD Y/C Mix BUFFER
DVD AUDIO
DVD COMP
REM-OUT
IS-BUS I/F
composite IN
NAVI SYNC
NAVI RGB
F-STBY
TO : MAIN P.W.B
LED +9V
NOSE
KEY A/D
IND
ENCODER
RESET SW

< LCD P.W.B >


FFB+5V
Cont-1,2,3/TRG/RESET
TP-SEL1,2,3,4
TP-X,Y
A/D +5V
PULSETOUCH
TOUCH PANEL
TO:TOUCH PANEL
Vadj/BL OFF
BLINVERTER
TO:LCD UNIT
A070FW03
BL+9V
VCOM
VGL
VGH
VSY
HSY
R/G/B(analog)
VCOM
VGL
VGH
PLL
OEH
CPH1
OEV
CSYNC
VISUAL+5V
TO:MAINP.W.B
SYNC.
Separator
VD
HD
MIX
Timing controller
3.3V

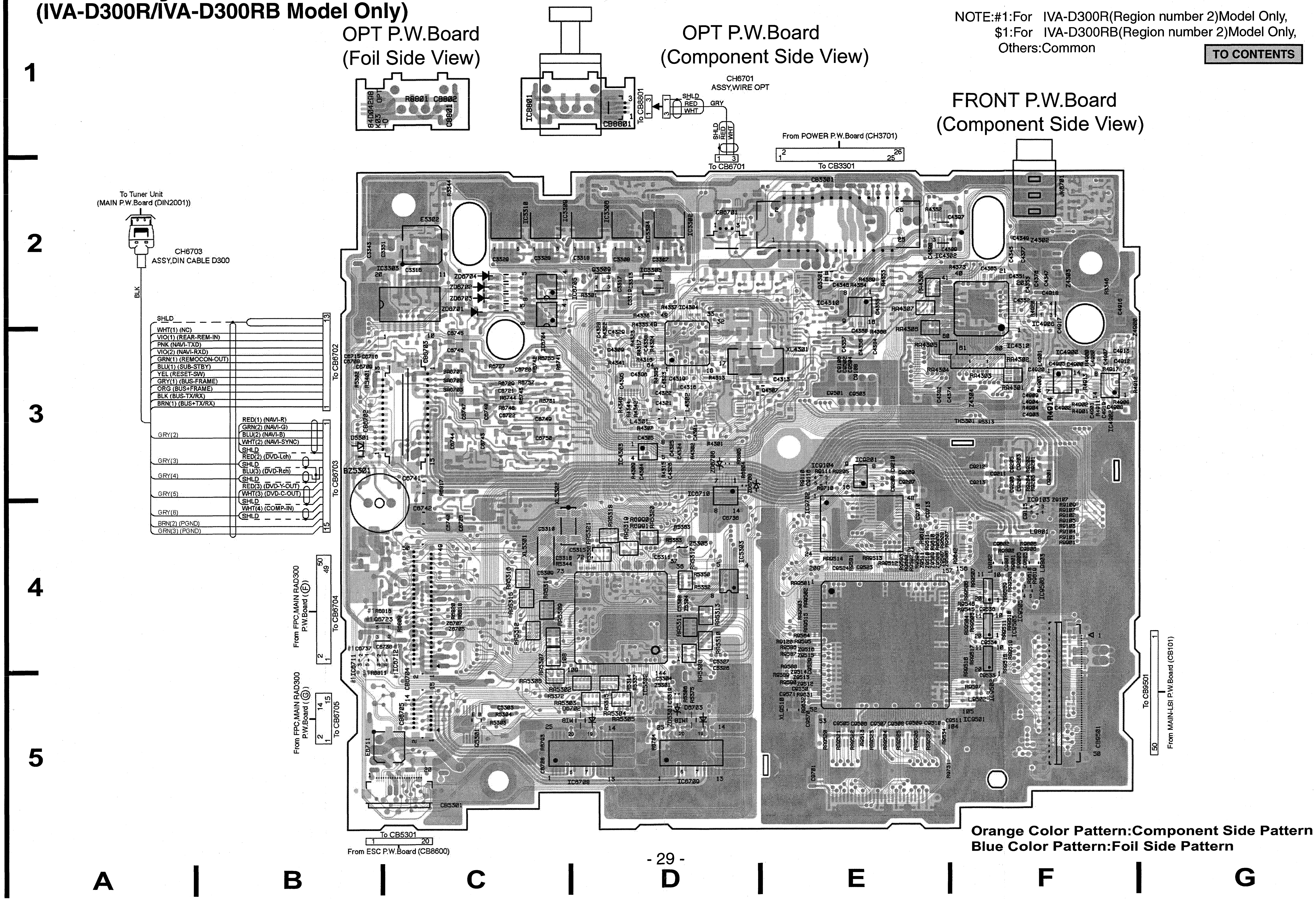
Parts Layout on P.W.Boards and Wiring Diagram (1/10)

(IVA-D300R/IVA-D300RB Model Only)

IVA-D300R/IVA-D300RB/IVA-D300E

NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
Others:Common

TO CONTENTS



OPT P.W.Board (Foil Side View)

OPT P.W.Board (Component Side View)

FRONT P.W.Board (Component Side View)

1
2
3
4
5
A
B
C
D
E
F
G
CH6701
ASSY,WIRE OPT
SHLD
RED
WHT
GRY
To CB6701
To CB8801
IC8801
CB8801
R8801
C8802
C8801
From POWER P.W.Board (CH3701)
To CB3301
To Tuner Unit
(MAIN P.W.Board (DIN2001))
CH6703
ASSY,DIN CABLE D300
BLK
SHLD
WHT(1) (NC)
VIO(1) (REAR-REM-IN)
PNK (NAVI-TXD)
VIO(2) (NAVI-RXD)
GRN(1) (REMOCON-OUT)
BLU(1) (SUB-STBY)
YEL (RESET-SW)
GRY(1) (BUS-FRAME)
ORG (BUS+FRAME)
BLK (BUS-TX/RX)
BRN(1) (BUS+TX/RX)
To CB6702
RED(1) (NAVI-R)
GRN(2) (NAVI-G)
BLU(2) (NAVI-B)
WHT(2) (NAVI-SYNC)
RED(2) (DVD-Lch)
BLU(3) (DVD-Rch)
RED(3) (DVD-Y-OUT)
WHT(3) (DVD-C-OUT)
WHT(4) (COMP-IN)
GRY(2)
GRY(3)
GRY(4)
GRY(5)
GRY(6)
BRN(2) (PGND)
GRN(3) (PGND)
To CB6703
From FPC,MAIN RAD300 P.W.Board (F)
To CB6704
From FPC,MAIN RAD300 P.W.Board (G)
To CB6705
To CB5301
From ESC P.W.Board (CB8600)
To CB9501
From MAIN-LSI P.W.Board (CB101)
JK6701
BZ5301
CB5301
CB3301
IC6708
IC6709
IC9501
CB6701

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (2/10)
(IVA-D300R/IVA-D300RB Model Only)

IVA-D300R/IVA-D300RB/IVA-D300E

NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
Others:Common

TO CONTENTS

1

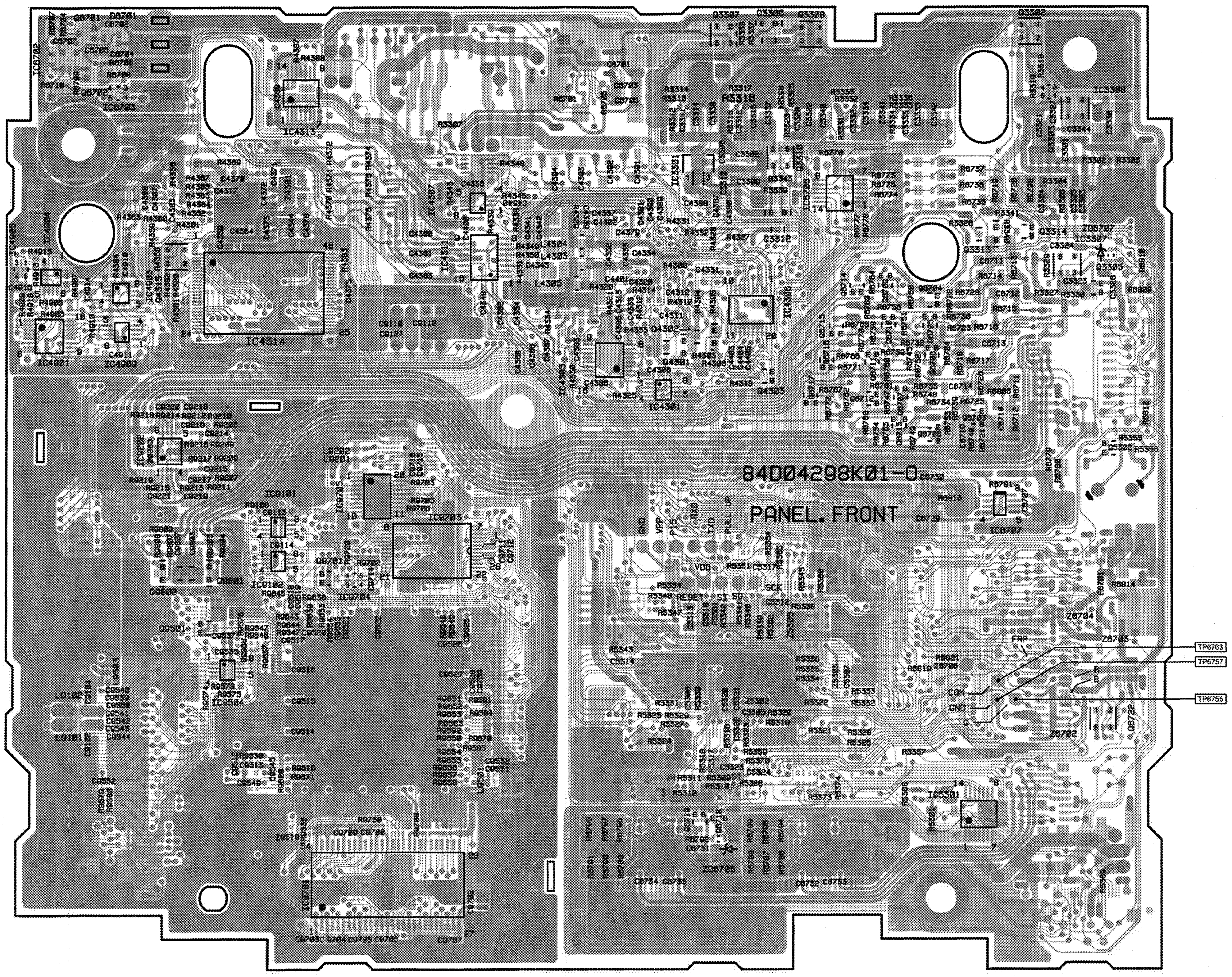
2

3

4

5

FRONT P.W.Board (Foil Side View)



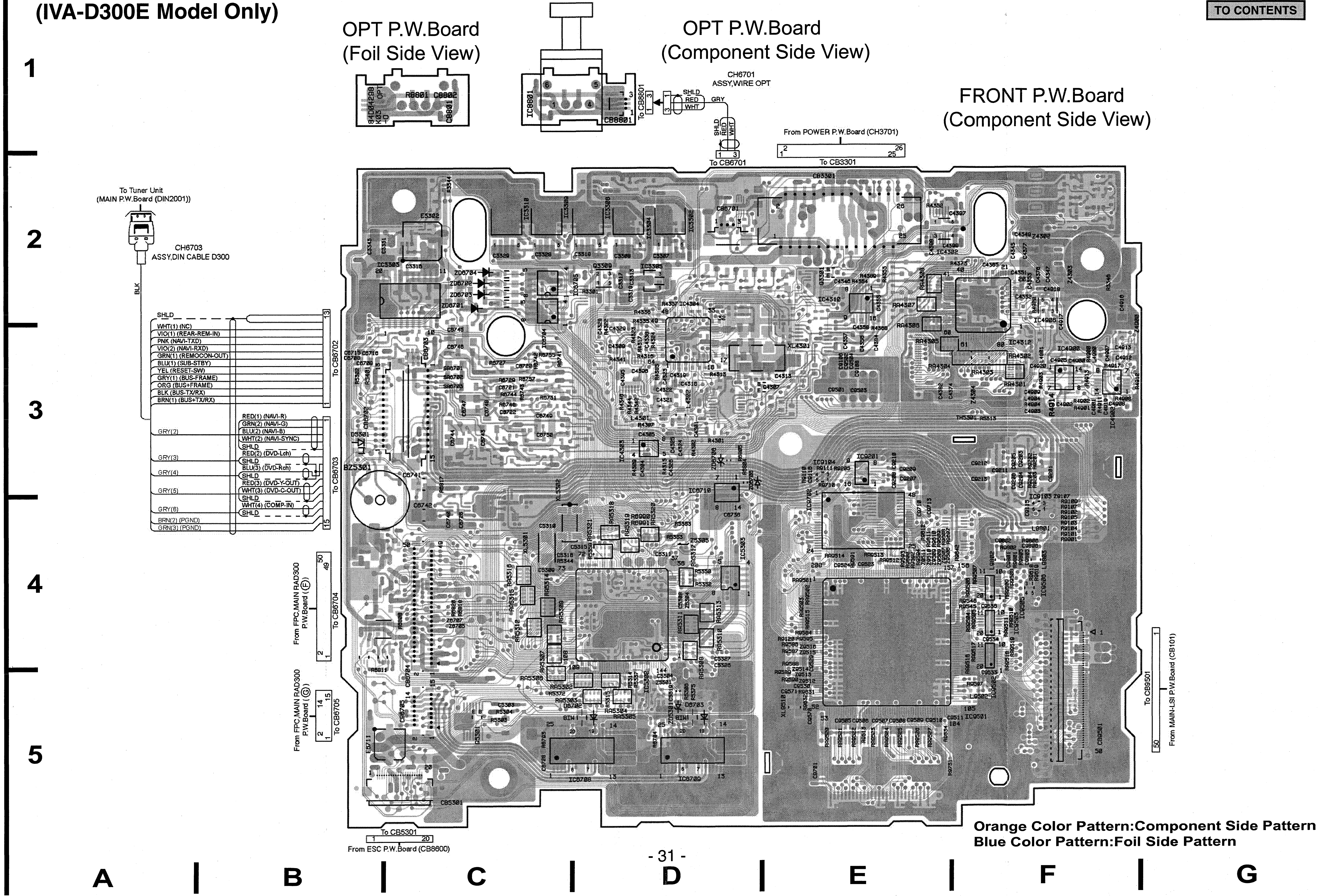
84D04298K01-0
PANEL. FRONT
IC4314
IC4901
IC4900
IC4313
IC4301
IC4311
IC4307
IC4330
IC5301
IC5308
IC5307
IC6702
IC6703
IC6707
IC9701
IC9703
IC9704
IC9504
IC9101
IC9102
IC9202
IC4905
IC4904
IC4906
Q3307
Q3306
Q3308
Q3302
Q3312
Q3313
Q3314
Q3305
Q4502
Q4503
Q4501
Q9801
Q9802
Q9501
Q9701
GND
VPP
P15
RXD
TXD
PULL UP
VDD
RESET
SI
SO
SCK
FRP
COM
GND
R
B
G
TP6763
TP6757
TP6755
ZD6702
ZD6703
ZD6704
ZD6705
ZD6707

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

A | B | C | D | E | F | G

Parts Layout on P.W.Boards and Wiring Diagram (3/10)

(IVA-D300E Model Only)


OPT P.W.Board
(Foil Side View)
OPT P.W.Board
(Component Side View)
FRONT P.W.Board
(Component Side View)
CH6701
ASSY,WIRE OPT
SHLD
RED
WHT
GRY
To CB8801
To CB6701
From POWER P.W.Board (CH3701)
To CB3301
To Tuner Unit
(MAIN P.W.Board (DIN2001))
CH6703
ASSY,DIN CABLE D300
BLK
SHLD
WHT(1) (NC)
VIO(1) (REAR-REM-IN)
PNK (NAVI-TXD)
VIO(2) (NAVI-RXD)
GRN(1) (REMOCON-OUT)
BLU(1) (SUB-STBY)
YEL (RESET-SW)
GRY(1) (BUS-FRAME)
ORG (BUS+FRAME)
BLK (BUS-TX/RX)
BRN(1) (BUS+TX/RX)
To CB6702
RED(1) (NAVI-R)
GRN(2) (NAVI-G)
BLU(2) (NAVI-B)
WHT(2) (NAVI-SYNC)
SHLD
RED(2) (DVD-Lch)
SHLD
BLU(3) (DVD-Rch)
SHLD
RED(3) (DVD-Y-OUT)
WHT(3) (DVD-C-OUT)
SHLD
WHT(4) (COMP-IN)
SHLD
GRY(2)
GRY(3)
GRY(4)
GRY(5)
GRY(6)
BRN(2) (PGND)
GRN(3) (PGND)
To CB6703
From FPC,MAIN RAD300 P.W.Board (F)
To CB6704
From FPC,MAIN RAD300 P.W.Board (G)
To CB6705
To CB5301
From ESC P.W.Board (CB8600)
To CB9501
From MAIN-LSI P.W.Board (CB101)
1
2
3
4
5
A
B
C
D
E
F
G

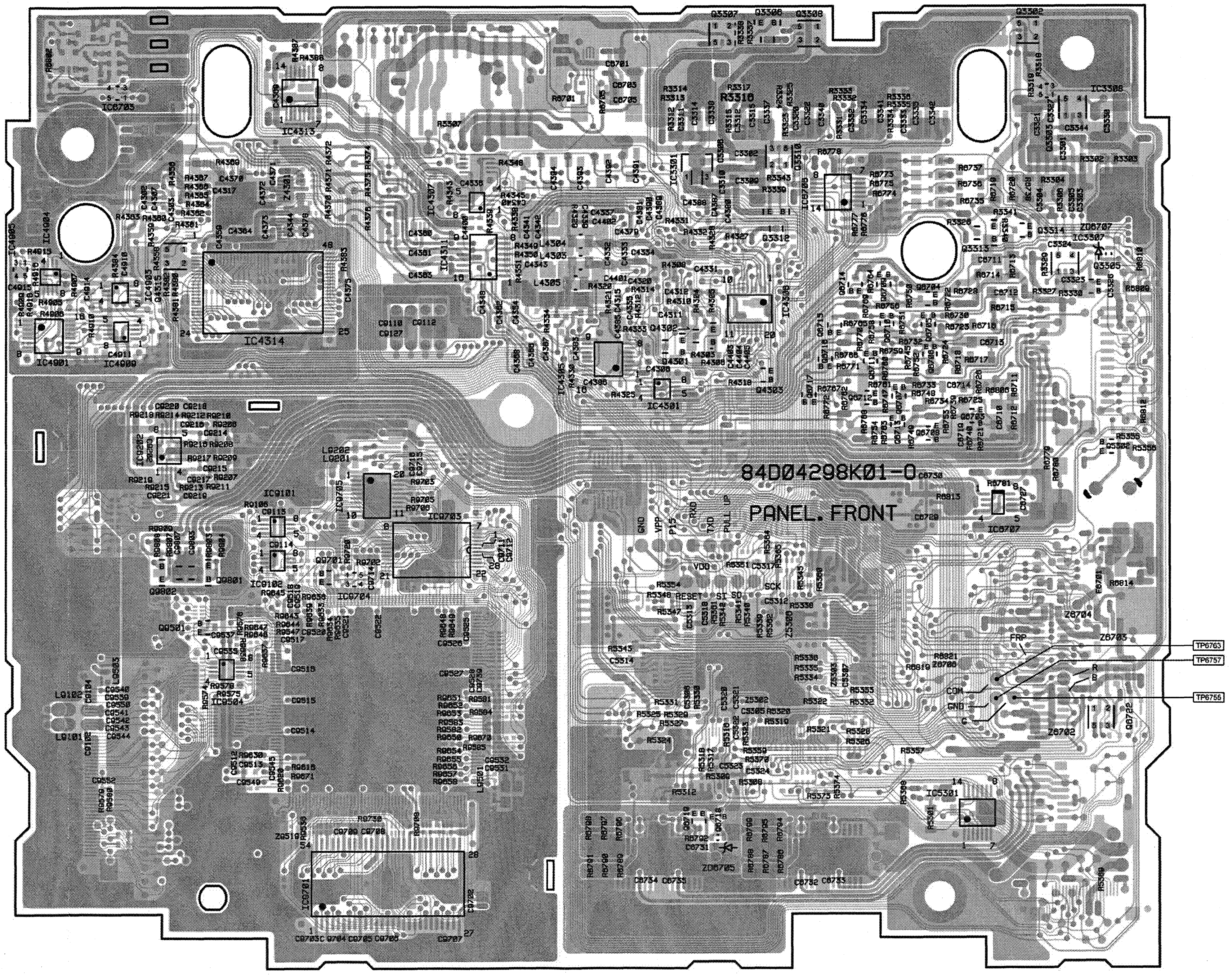
Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

TO CONTENTS

Parts Layout on P.W.Boards and Wiring Diagram (4/10)

(IVA-D300E Model Only)

FRONT P.W.Board (Foil Side View)


84D04298K01-0
PANEL. FRONT
IC4313
IC4314
IC4901
IC4900
IC4904
IC4905
IC6705
IC3308
IC3307
IC4307
IC4311
IC4308
IC4305
IC4501
IC4303
IC3301
IC3705
IC9202
IC9101
IC9102
IC0705
IC0703
IC0704
IC0504
IC0701
IC5301
IC6707
Q3307
Q3306
Q3308
Q3302
Q3305
Q4302
Q4301
Q4303
Q9801
Q9802
Q9501
GND
VPP
P15
RXD
TXD
PULL UP
VDD
RESET
SI
SO
SCK
FRP
COM
GND
R
B
G
TP6763
TP6757
TP6755
Z6704
Z6703
Z6702
Z6705
Z6707
L9202
L9201
L0102
L0101
L4304
L4305

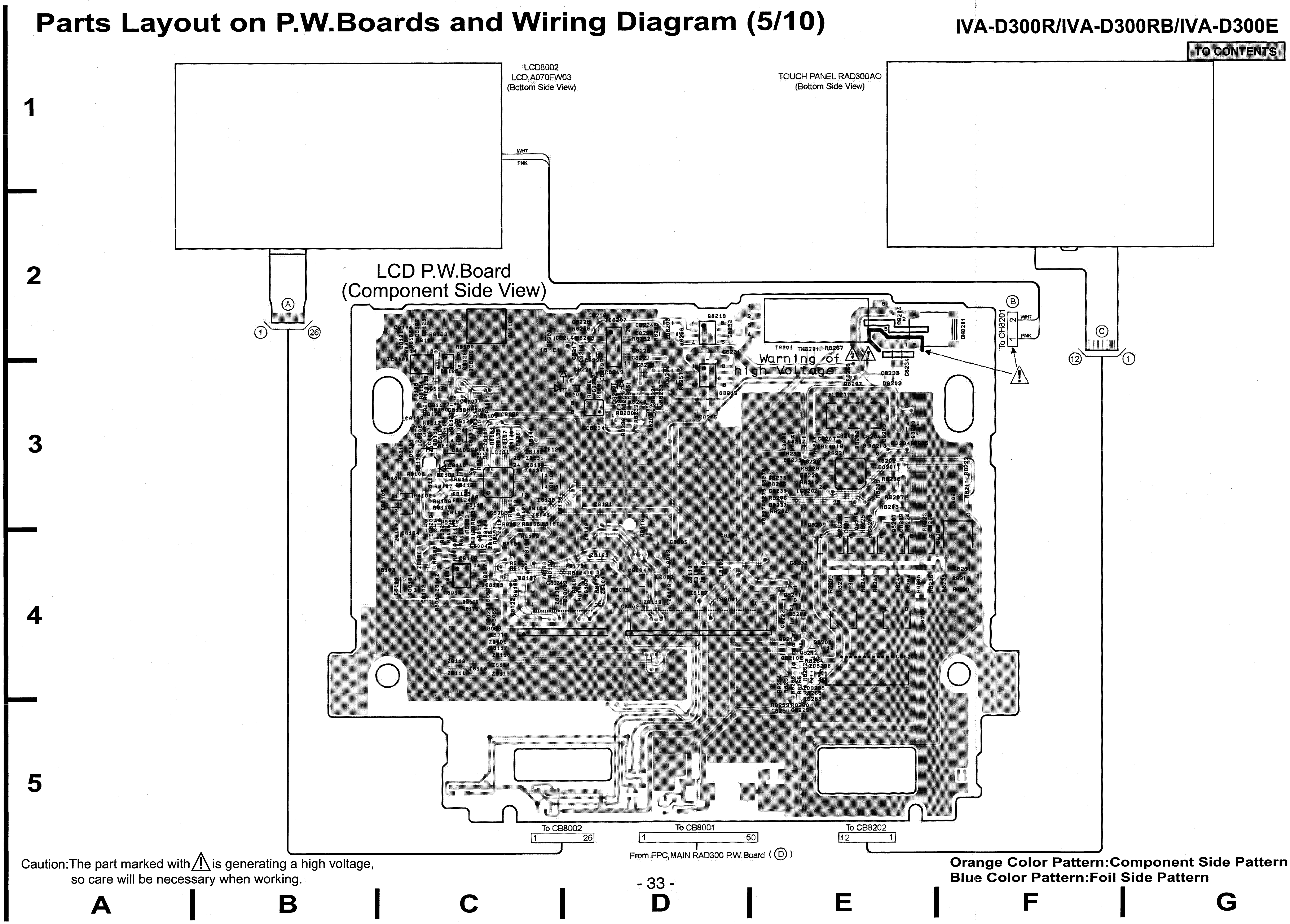
Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

1
2
3
4
5

A | B | C | D | E | F | G

Parts Layout on P.W.Boards and Wiring Diagram (5/10)

TO CONTENTS


1
2
3
4
5
A
B
C
D
E
F
G
LCD8002
LCD,A070FW03
(Bottom Side View)
TOUCH PANEL RAD300AO
(Bottom Side View)
WHT
PNK
LCD P.W.Board
(Component Side View)
Ⓐ
①
㉖
Ⓑ
Ⓒ
⑫
①
To CH8201
Warning of
high Voltage
To CB8002
1
26
To CB8001
1
50
To CB8202
12
1
From FPC,MAIN RAD300 P.W.Board (Ⓓ)

Caution:The part marked with ⚠ is generating a high voltage, so care will be necessary when working.

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (6/10)

Caution:The part marked with ⚠ is generating a high voltage, so care will be necessary when working.

NOTE:#1:For IVA-D300R(Region number 2)Model Only, Others:Common

1

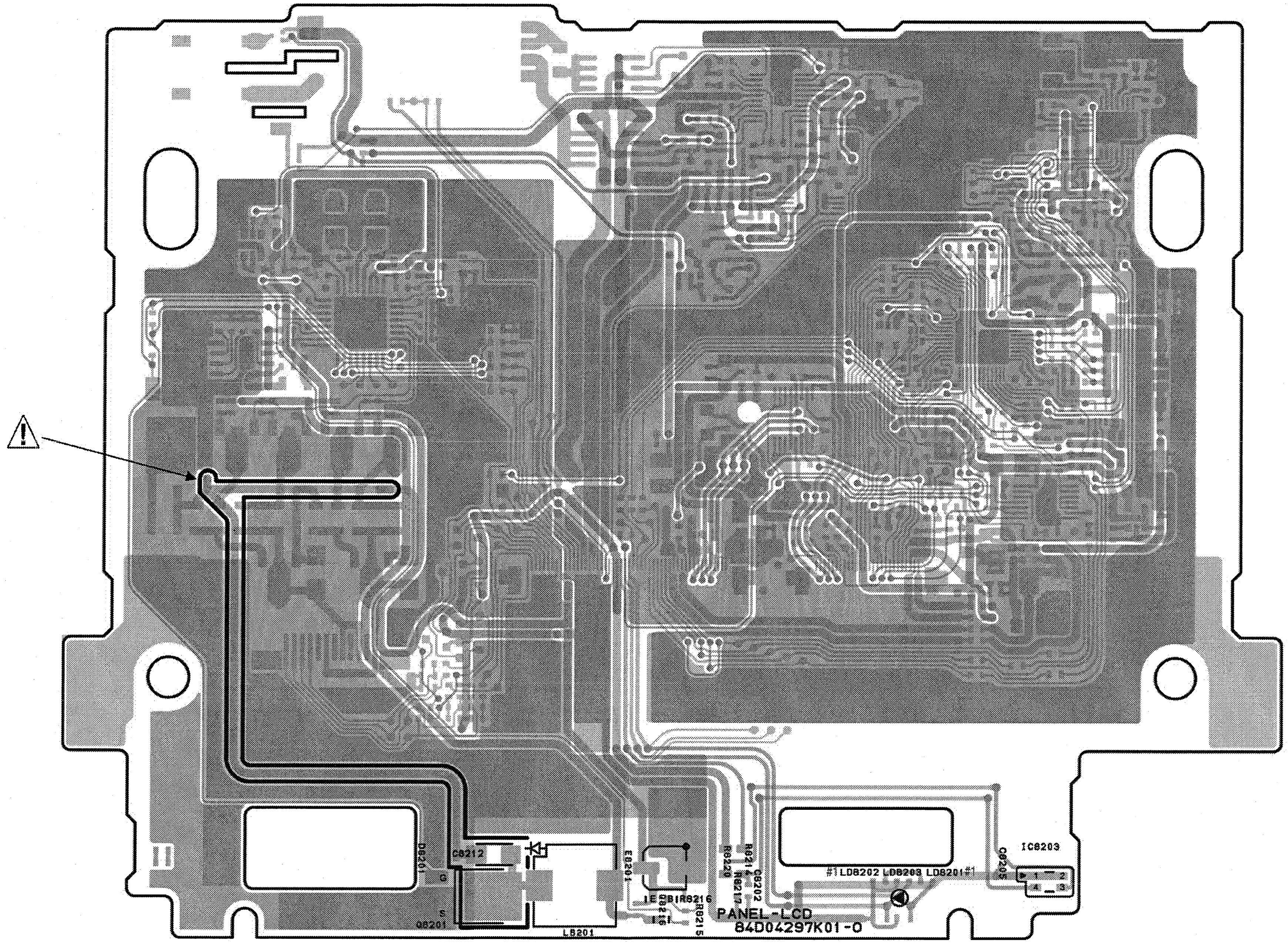
2

3

4

5

LCD P.W.Board (Foil Side View)


⚠
D8201
C8212
G
S
Q8201
L8201
E8201
1E
B
R8216
Q8216
R8215
R8220
R8214
R8217
C8202
PANEL-LCD
84D04297K01-0
#1 LD8202 LD8203 LD8201 #1
C8205
IC8203
1
2
3
4

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

A | B | C | D | E | F | G

Parts Layout on P.W.Boards and Wiring Diagram (7/10)

1

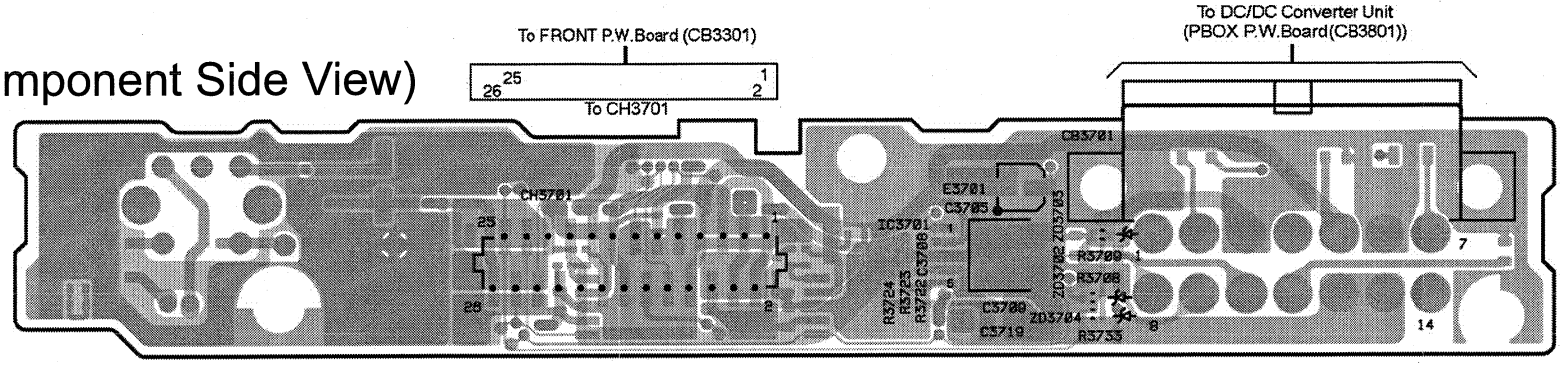
2

3

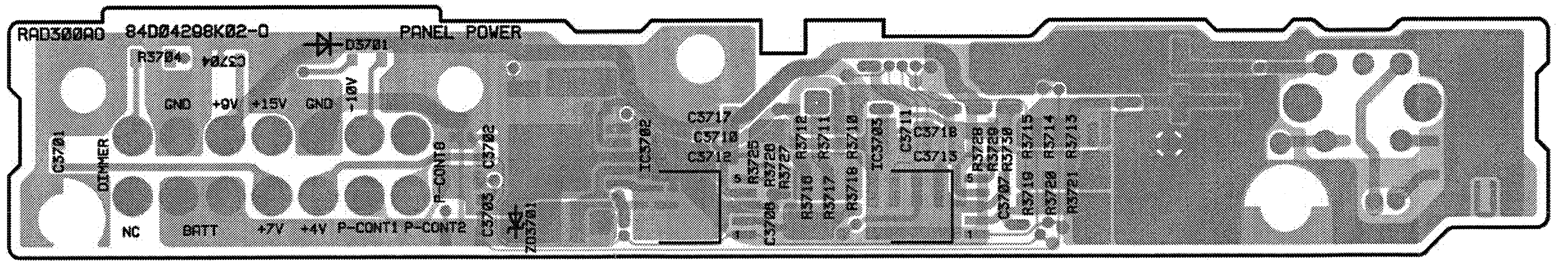
4

5

POWER P.W.Board (Component Side View)


To FRONT P.W.Board (CB3301)
25
26
1
2
To CH3701
To DC/DC Converter Unit
(PBOX P.W.Board(CB3801))
CB3701
CH3701
E3701
C3705
IC3701
R3724
R3723
R3722
C3708
ZD3702
ZD3703
R3700
R3708
C3700
ZD3704
C3719
R3733
7
8
14

POWER P.W.Board (Foil Side View)


RAD300A0
84D04298K02-0
D3701
PANEL POWER
R3704
C3704
GND
+9V
+15V
GND
-10V
C3701
DIMMER
P-CON10
C3702
C3703
ZD3701
NC
BATT
+7V
+4V
P-CONT1
P-CONT2
IC3702
C3717
C3710
C3712
R3725
R3726
R3727
C3706
R3712
R3711
R3716
R3717
R3710
R3718
IC3703
C3711
C3718
C3713
R3728
R3729
R3730
C3707
R3715
R3714
R3713
R3719
R3720
R3721

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

A | B | C | D | E | F | G

Parts Layout on P.W.Boards and Wiring Diagram (8/10)

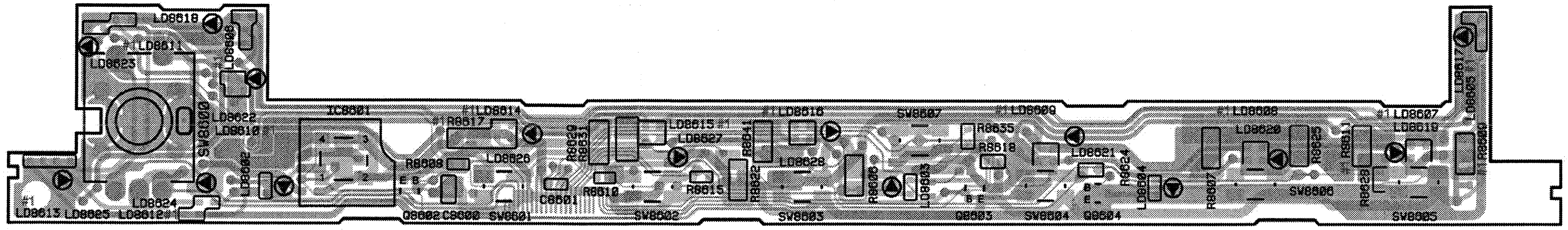
IVA-D300R/IVA-D300RB/IVA-D300E

TO CONTENTS

NOTE:#1:For IVA-D300R(Region number 2)Model Only,
Others:Common

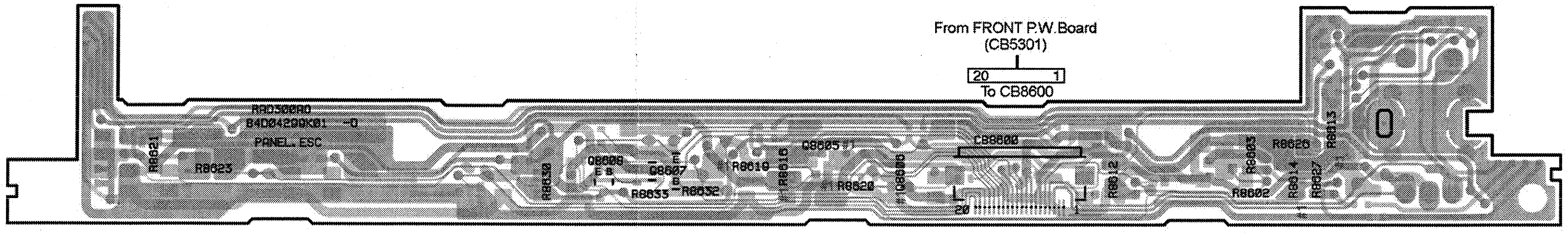
1

ESC P.W.Board (Component Side View) (IVA-D300R/IVA-D300RB Model Only)


LD8618
#1LD8611
LD8623
SW8600
LD8622
LD8610
IC8601
#1LD8614
R8617
LD8626
R8609
C8601
R8610
LD8615
LD8627
#1LD8616
LD8628
SW8607
#1LD8609
R8635
R8618
LD8621
#1LD8608
LD8620
#1LD8607
LD8619
LD8613
LD8625
LD8612
LD8624
Q8602
C8600
SW8601
SW8602
SW8603
Q8603
SW8604
Q8604
SW8606
SW8605
LD8617
LD8605

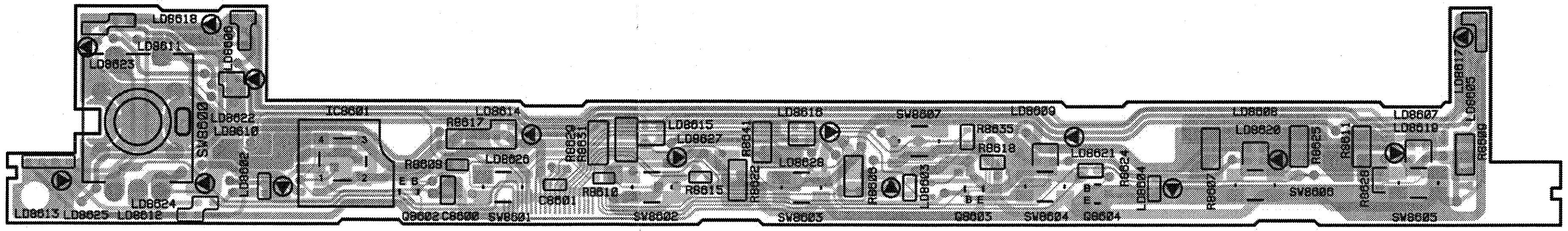
2

ESC P.W.Board (Foil Side View) (IVA-D300R/IVA-D300RB Model Only)


From FRONT P.W.Board
(CB5301)
20
1
To CB8600
RRD300RO
84D04290K01
PANEL ESC
R8621
R8623
R8630
Q8606
Q8607
R8633
R8632
#1R8616
Q8605
#1R8620
CB8600
20
1
R8612
R8603
R8626
R8613
R8602
R8614
R8627

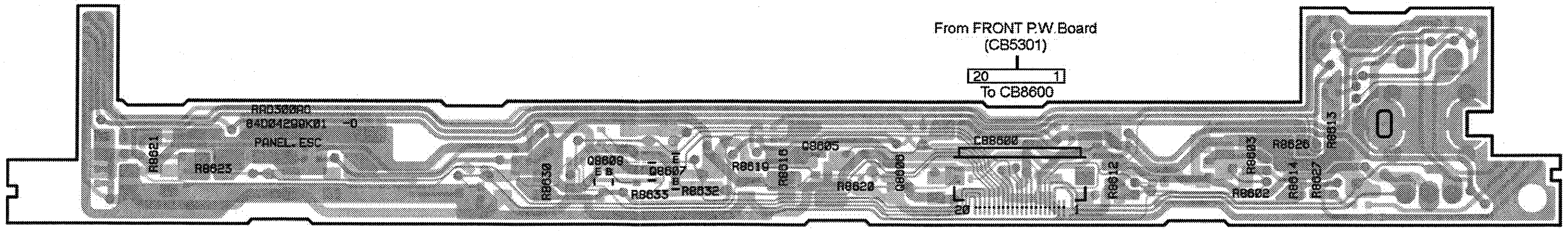
3

ESC P.W.Board (Component Side View) (IVA-D300E Model Only)


LD8618
LD8611
LD8623
SW8600
LD8622
LD8610
IC8601
LD8614
R8617
LD8626
R8609
C8601
R8610
LD8615
LD8627
R8615
LD8616
LD8628
SW8607
LD8609
R8635
R8618
LD8621
LD8608
LD8620
LD8607
LD8619
LD8613
LD8625
LD8612
LD8624
Q8602
C8600
SW8601
SW8602
SW8603
Q8603
SW8604
Q8604
SW8606
SW8605
LD8617
LD8605

4

ESC P.W.Board (Foil Side View) (IVA-D300E Model Only)


From FRONT P.W.Board
(CB5301)
20
1
To CB8600
RRD300RO
84D04290K01
PANEL ESC
R8621
R8623
R8630
Q8606
Q8607
R8633
R8632
R8616
Q8605
R8620
CB8600
20
1
R8612
R8603
R8626
R8613
R8602
R8614
R8627

5

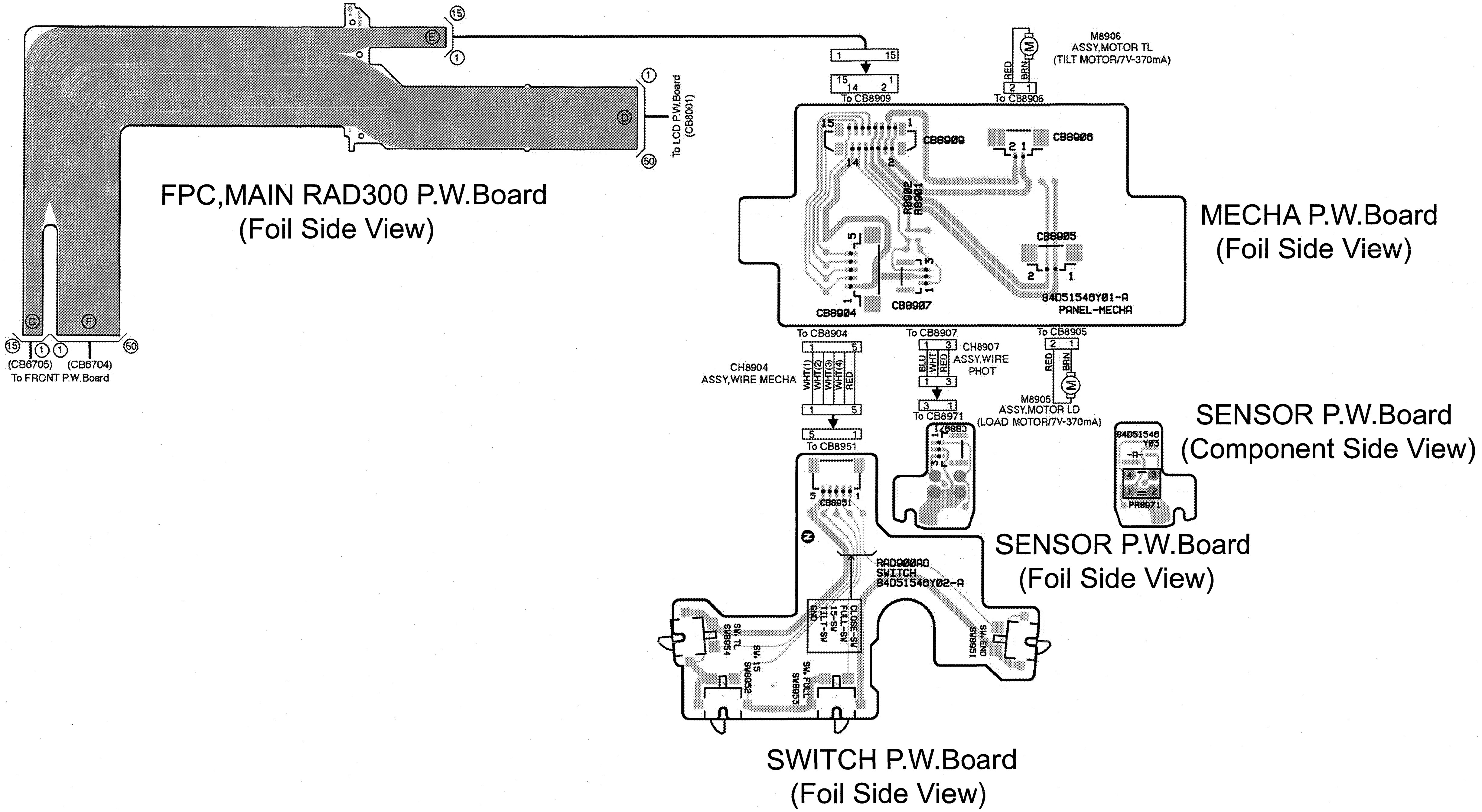
Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

A B C D E F G

Parts Layout on P.W.Boards and Wiring Diagram (9/10)

TO CONTENTS

1
2
3
4
5

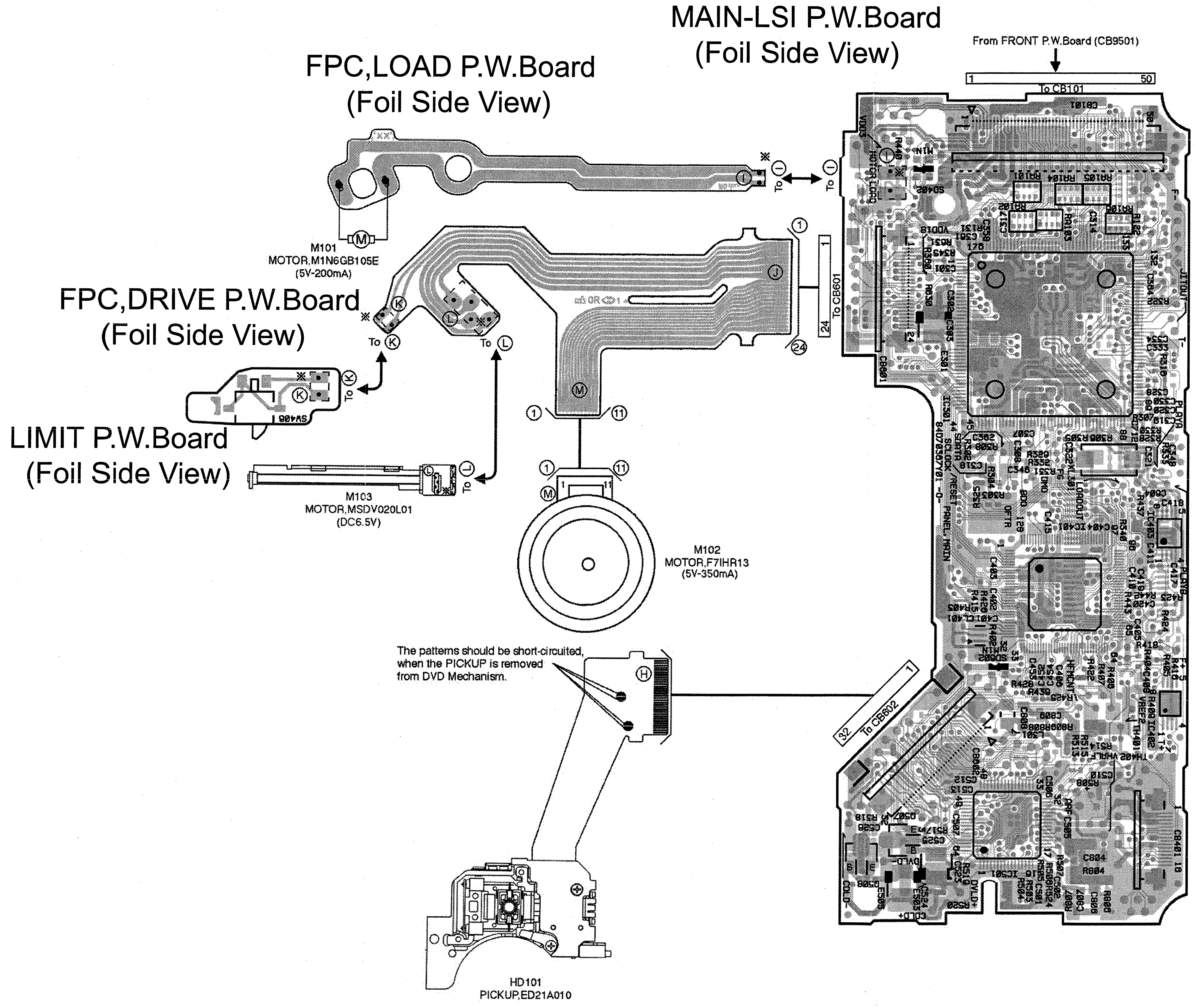

FPC,MAIN RAD300 P.W.Board
(Foil Side View)
15
E
1
1
D
50
To LCD P.W.Board
(CB8001)
G
F
15
1
1
50
(CB6705)
(CB6704)
To FRONT P.W.Board
1
15
15
14
2
1
To CB8909
M8906
ASSY,MOTOR TL
(TILT MOTOR/7V-370mA)
M
RED
BRN
2
1
To CB8906
MECHA P.W.Board
(Foil Side View)
CB8909
CB8906
R8902
R8901
CB8905
CB8904
CB8907
84D51546Y01-A
PANEL-MECHA
To CB8904
To CB8907
To CB8905
CH8904
ASSY,WIRE MECHA
WHT(1)
WHT(2)
WHT(3)
WHT(4)
RED
1
5
5
1
To CB8951
CH8907
ASSY,WIRE
PHOT
BLU
WHT
RED
1
3
3
1
To CB8971
M8905
ASSY,MOTOR LD
(LOAD MOTOR/7V-370mA)
CB8971
SENSOR P.W.Board
(Component Side View)
84D51546
Y03
-A-
4
3
1
2
PR8971
SENSOR P.W.Board
(Foil Side View)
CB8951
RAD900A0
SWITCH
84D51546Y02-A
CLOSE-SV
FULL-SW
15-SW
TILT-SW
GND
SW.TL
SW8954
SW.15
SW8952
SW.FULL
SW8953
SW.END
SW8951
SWITCH P.W.Board
(Foil Side View)

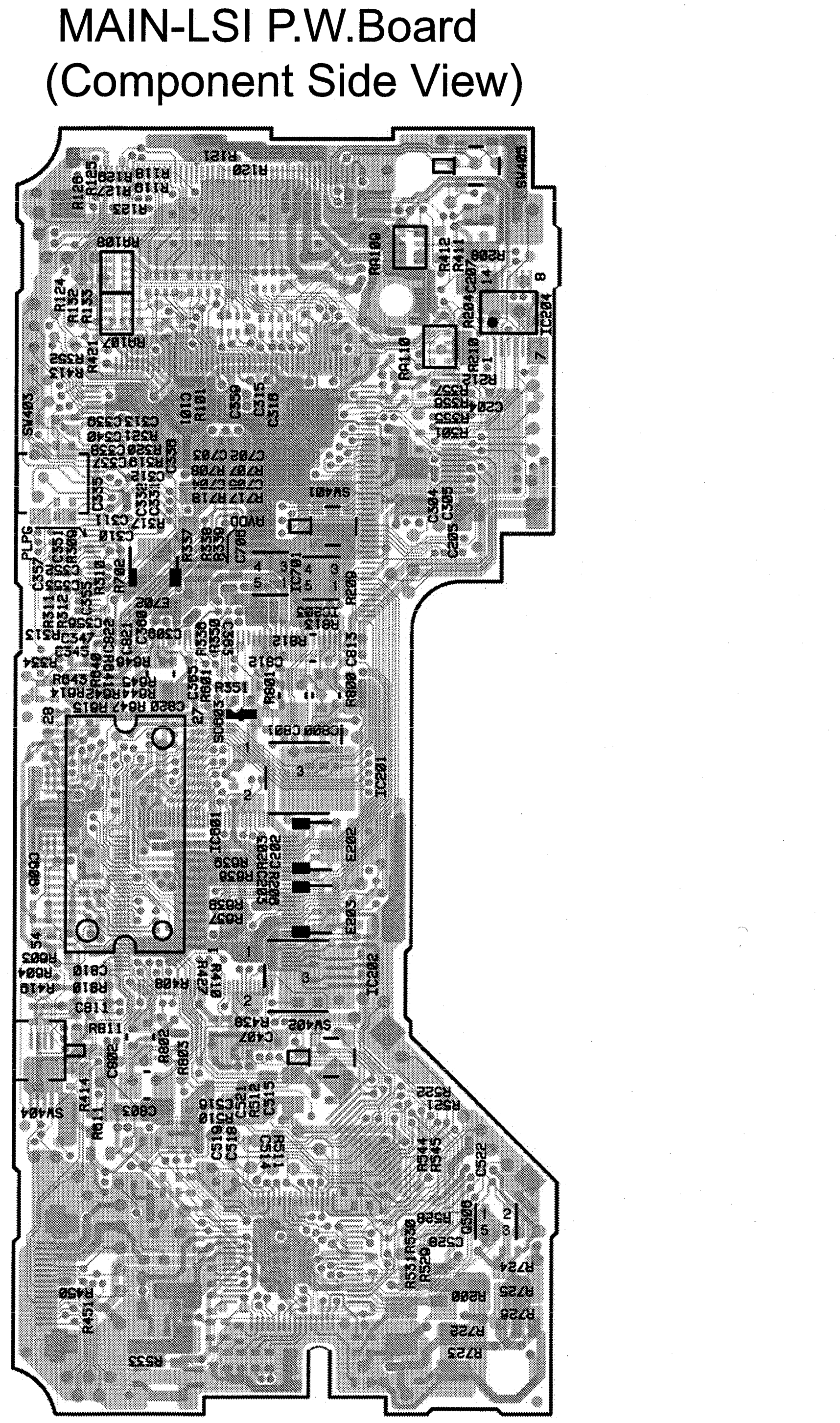
Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

A | B | C | D | E | F | G

Parts Layout on P.W.Boards and Wiring Diagram (10/10)

TO CONTENTS


FPC,LOAD P.W.Board
(Foil Side View)
M101
MOTOR,M1N6GB105E
(5V-200mA)
FPC,DRIVE P.W.Board
(Foil Side View)
LIMIT P.W.Board
(Foil Side View)
SW406
M103
MOTOR,MSDV020L01
(DC6.5V)
M102
MOTOR,F7IHR13
(5V-350mA)
To Ⓘ
To Ⓚ
To Ⓛ
To CB601
1
24
Ⓙ
Ⓜ
Ⓗ
The patterns should be short-circuited, when the PICKUP is removed from DVD Mechanism.
HD101
PICKUP,ED21A010
MAIN-LSI P.W.Board
(Foil Side View)
From FRONT P.W.Board (CB9501)
To CB101
1
50
To CB602
32
1


MAIN-LSI P.W.Board
(Component Side View)

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

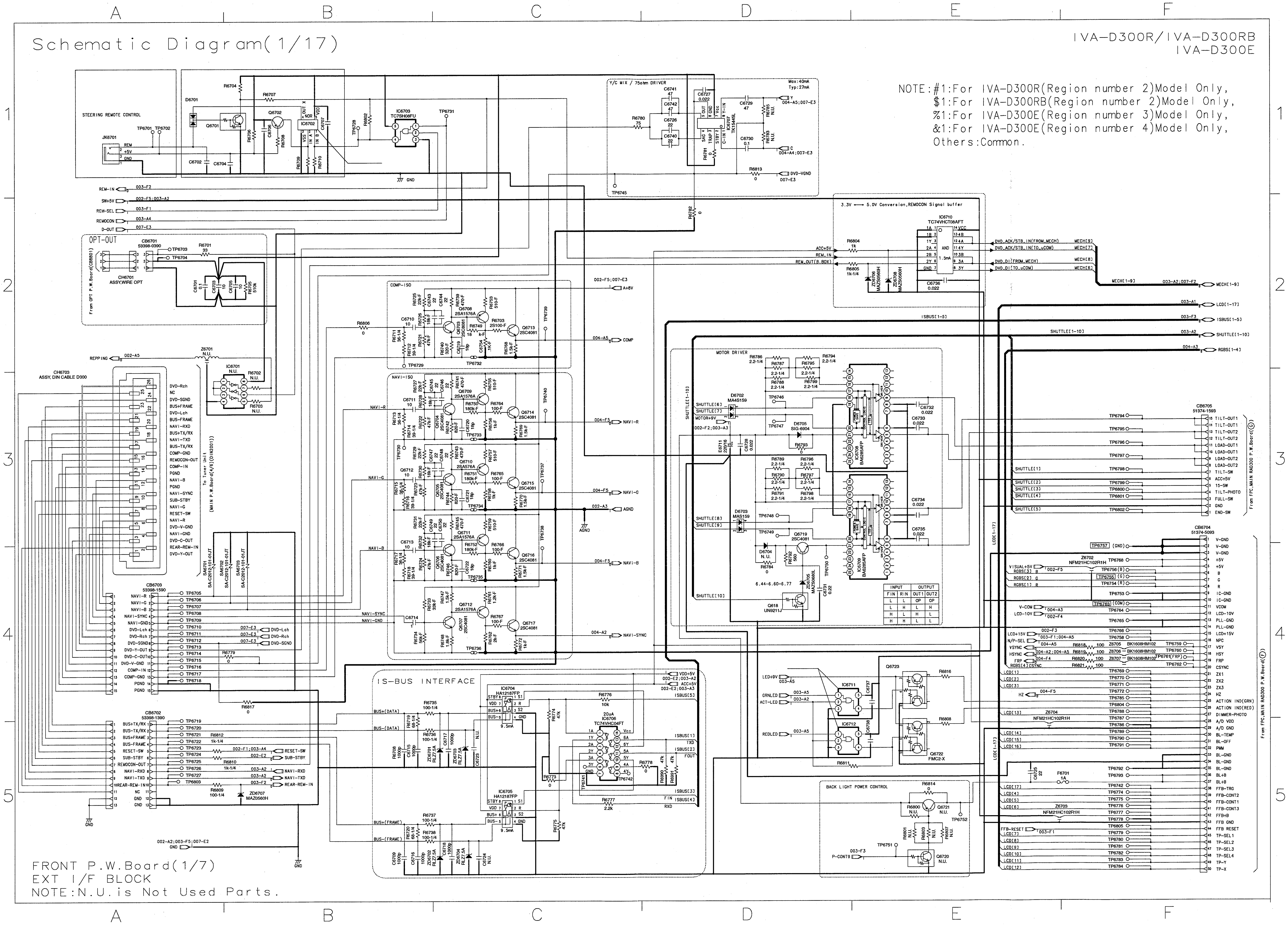
1 2 3 4 5

A B C D E F G

Schematic Diagram(1/17)

IVA-D300R/IVA-D300RB
IVA-D300E

NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
%1:For IVA-D300E(Region number 3)Model Only,
&1:For IVA-D300E(Region number 4)Model Only,
Others:Common.


A
B
C
D
E
F
1
2
3
4
5
STEERING REMOTE CONTROL
JK6701
TP6701 TP6702
REM
+5V
GND
D6701
Q6701
Q6702
IC6702
IC6703 TC7SH08FU
TP6731
Y/C MIX / 75ohm DRIVER
Max:40mA Typ:27mA
IC6707
004-A5;007-E3
004-A4;007-E3
DVD-VGND 007-E3
TP6745
REM-IN 003-F2
SW+5V 002-F5;003-A2
REM-SEL 003-F1
REMOCON 003-A4
D-OUT 007-E3
OPT-OUT
CB6701 53398-0390
TP6703
TP6704
CH6701 ASSY,WIRE OPT
From OPT P.W.Board(CB8801)
3.3V ⟷ 5.0V Conversion,REMOCON Signal buffer
IC6710 TC74VHCT08AFT
ACC+5V
REM_IN
REM_OUT(B.BOX)
DVD_ACK/STB_IN(FROM_MECH)
DVD_ACK/STB_IN(TO_uCOM)
DVD_DI(FROM_MECH)
DVD_DI(TO_uCOM)
MECH[1-9]
003-A2;007-F2
LCD[1-17]
ISBUS[1-5]
SHUTTLE[1-10]
RGBS[1-4]
COMP-ISO
002-F5;007-E3
A+8V
004-A5 COMP
NAVI-ISO
004-F5 NAVI-R
004-F5 NAVI-G
002-A3 AGND
004-F5 NAVI-B
004-A2 NAVI-SYNC
REPPING 002-A5
Z6701 N.U.
IC6701 N.U.
CH6703 ASSY,DIN CABLE D300
DVD-Rch
NC
DVD-SGND
BUS+FRAME
DVD-Lch
BUS-FRAME
NAVI-RXD
BUS+TX/RX
NAVI-TXD
BUS-TX/RX
COMP-GND
REMOCON-OUT
COMP-IN
PGND
NAVI-B
PGND
NAVI-SYNC
SUB-STBY
NAVI-G
RESET-SW
NAVI-R
DVD-V-GND
NAVI-GND
DVD-C-OUT
REAR-REM-IN
DVD-Y-OUT
To Tuner Unit (MAIN P.W.Board(4/6)(DIN2011))
CB6703 53398-1590
CB6702 53398-1390
MOTOR DRIVER
SHUTTLE[1-10]
MOTOR+9V 002-F2;003-A3
IC6708 BA6285AFP
IC6709 BA6285AFP
Q618 UN9211J
6.44-6.60-6.77
CB6705 51374-1593
TILT-OUT1
TILT-OUT1
TILT-OUT2
TILT-OUT2
LOAD-OUT1
LOAD-OUT1
LOAD-OUT2
LOAD-OUT2
TILT-SW
ACC+5V
15-SW
TILT-PHOTO
FULL-SW
GND
END-SW
From FPC,MAIN RAD300 P.W.Board(G)
CB6704 51374-5093
From FPC,MAIN RAD300 P.W.Board(F)
IS-BUS INTERFACE
IC6704 HA12187FP
IC6705 HA12187FP
IC6706 TC74VHC04FT
VDD+5V 002-E2;003-A2
ACC+5V 002-E2;003-A3
Q6723
IC6711
IC6712
Q6722 FMC2-X
LED+9V 003-A5
GRNLED 003-A5
ACT-LED 003-A2
REDLED 003-A5
BACK LIGHT POWER CONTROL
Q6721 N.U.
Q6720 N.U.
P-CONT9 003-F3
FFB-RESET 003-F1
002-A2;003-F5;007-E2 GND

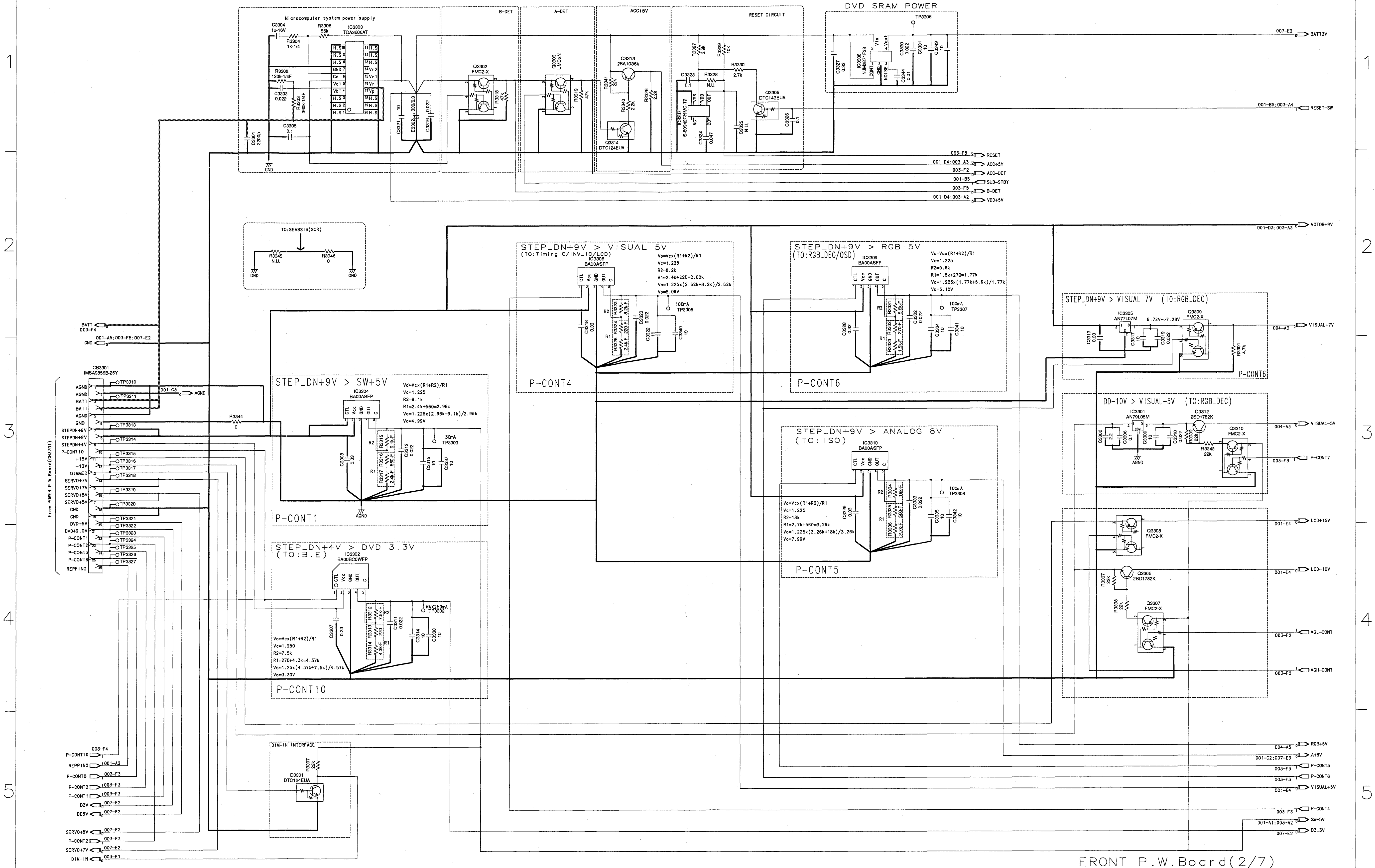
INPUT		OUTPUT	
FIN	RIN	OUT1	OUT2
L	L	OP	OP
L	H	L	H
H	L	H	L
H	H	L	L

FRONT P.W.Board(1/7)
EXT I/F BLOCK
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(2/17)

IVA-D300R/IVA-D300RB
IVA-D300E

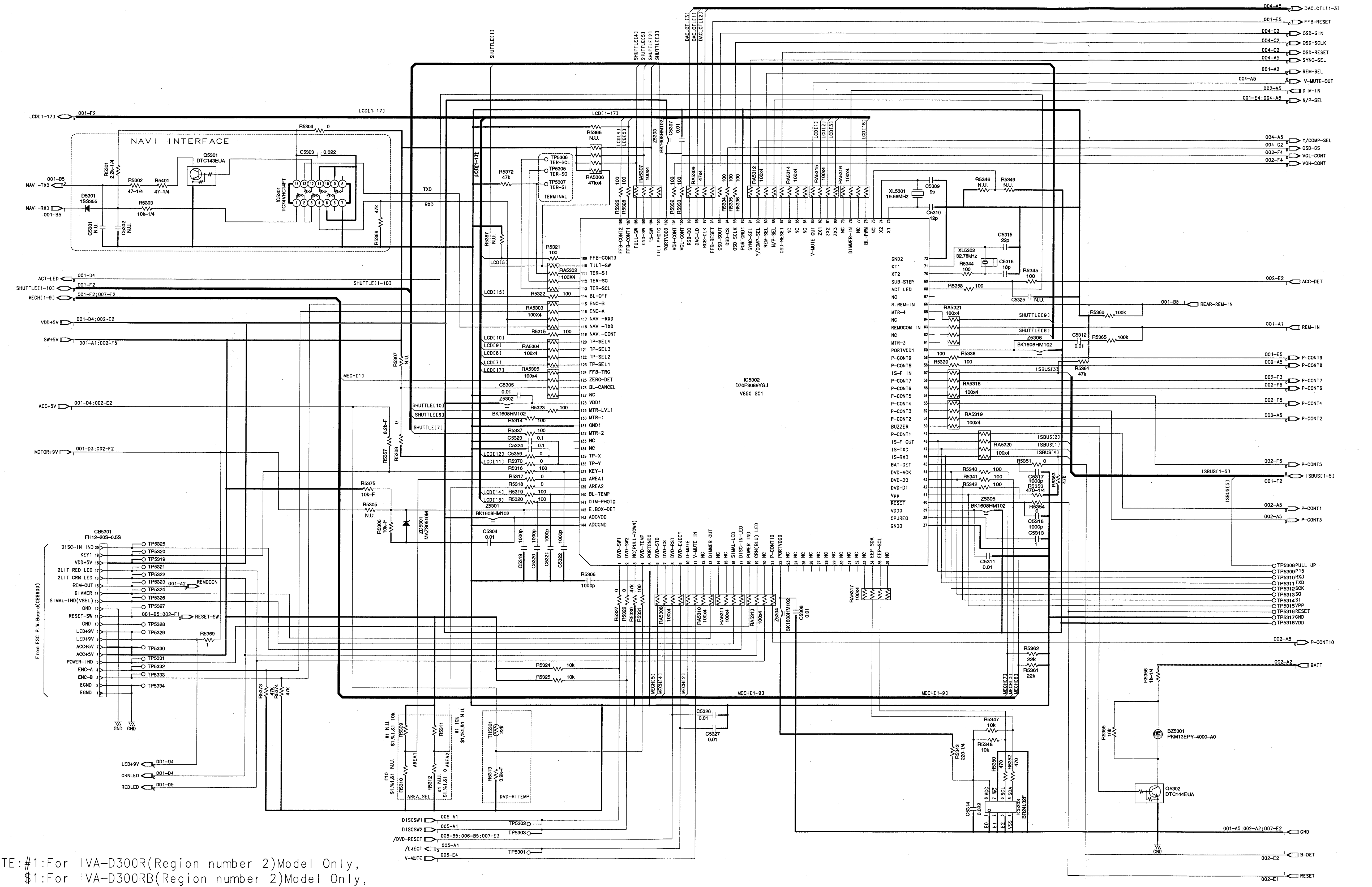

Microcomputer system power supply
IC3303 TDA3606AT
B-DET
Q3302 FMC2-X
A-DET
Q3303 UMC2N
ACC+5V
Q3313 2SA1036K
Q3314 DTC124EUA
RESET CIRCUIT
IC3307 S-80942CNMC-T2
Q3305 DTC143EUA
DVD SRAM POWER
IC3308 NJM2871F33
TP3306
BATT3V
RESET-SW
RESET
ACC+5V
ACC-DET
SUB-STBY
B-DET
VDD+5V
MOTOR+9V
TO:SEASSIS(SCR)
R3345 N.U.
R3346 0
GND
STEP_DN+9V > VISUAL 5V
(TO:TimingIC/INV_IC/LCD)
IC3306 BA00ASFP
Vo=Vcx(R1+R2)/R1
Vc=1.225
R2=8.2k
R1=2.4k+220=2.62k
Vo=1.225x(2.62k+8.2k)/2.62k
Vo=5.06V
100mA TP3305
P-CONT4
STEP_DN+9V > RGB 5V
(TO:RGB_DEC/OSD)
IC3309 BA00ASFP
Vo=Vcx(R1+R2)/R1
Vc=1.225
R2=5.6k
R1=1.5k+270=1.77k
Vo=1.225x(1.77k+5.6k)/1.77k
Vo=5.10V
100mA TP3307
P-CONT6
STEP_DN+9V > VISUAL 7V (TO:RGB_DEC)
IC3305 AN77L07M
6.72V~7.28V
Q3309 FMC2-X
VISUAL+7V
P-CONT6
DD-10V > VISUAL-5V (TO:RGB_DEC)
IC3301 AN79L05M
Q3312 2SD1782K
Q3310 FMC2-X
VISUAL-5V
P-CONT7
BATT
003-F4
GND
CB3301 IMSA9656B-26Y
AGND
AGND
BATT
BATT
AGND
GND
STEPDN+9V
STEPDN+9V
STEPDN+4V
P-CONT10
+15V
-10V
DIMMER
SERVO+7V
SERVO+7V
SERVO+5V
SERVO+5V
GND
GND
DVD+5V
DVD+2.0V
P-CONT1
P-CONT2
P-CONT3
P-CONT8
REPPING
From POWER P.W.Board(CH3701)
STEP_DN+9V > SW+5V
IC3304 BA00ASFP
Vo=Vcx(R1+R2)/R1
Vc=1.225
R2=9.1k
R1=2.4k+560=2.96k
Vo=1.225x(2.96k+9.1k)/2.96k
Vo=4.99V
30mA TP3303
P-CONT1
STEP_DN+9V > ANALOG 8V
(TO:ISO)
IC3310 BA00ASFP
Vo=Vcx(R1+R2)/R1
Vc=1.225
R2=18k
R1=2.7k+560=3.26k
Vo=1.225x(3.26k+18k)/3.26k
Vo=7.99V
100mA TP3308
P-CONT5
Q3308 FMC2-X
LCD+15V
Q3306 2SD1782K
LCD-10V
Q3307 FMC2-X
VGL-CONT
VGH-CONT
STEP_DN+4V > DVD 3.3V
(TO:B.E)
IC3302 BA00BC0WFP
MAX250mA TP3302
Vo=Vcx(R1+R2)/R1
Vc=1.250
R2=7.5k
R1=270+4.3k=4.57k
Vo=1.25x(4.57k+7.5k)/4.57k
Vo=3.30V
P-CONT10
DIM-IN INTERFACE
Q3301 DTC124EUA
R3307 22k
P-CONT10
REPPING
P-CONT8
P-CONT3
P-CONT1
D2V
BE5V
SERVO+5V
P-CONT2
SERVO+7V
DIM-IN
RGB+5V
A+8V
P-CONT5
P-CONT6
VISUAL+5V
P-CONT4
SW+5V
D3_3V

FRONT P.W.Board(2/7)
MAIN POWER BLOCK
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(3/17)

IVA-D300R/IVA-D300RB
IVA-D300E


A
B
C
D
E
F
1
2
3
4
5
NAVI INTERFACE
Q5301 DTC143EUA
IC5301 TC7WH14FT
IC5302 D70F3089YGJ V850 SC1
XL5301 19.66MHz
XL5302 32.76kHz
CB5301 FH12-20S-0.5S
From ESC P.W.Board(CB8600)
IC5303 BR24L32F
Q5302 DTC144EUA
BZ5301 PKM13EPY-4000-A0
ZD5301 MAZ30510M
D5301 1SS355
TH5301 22k
AREA_SEL
DVD-HITEMP
TERMINAL
LCD[1-17]
SHUTTLE[1-10]
MECH[1-9]
ISBUS[1-5]
DAC_CTL[1-3]
NAVI-TXD
NAVI-RXD
ACT-LED
VDD+5V
SW+5V
ACC+5V
MOTOR+9V
LED+9V
GRNLED
REDLED
DISCSW1
DISCSW2
/DVD-RESET
/EJECT
V-MUTE
FFB-RESET
OSD-SIN
OSD-SCLK
OSD-RESET
SYNC-SEL
REM-SEL
V-MUTE-OUT
DIM-IN
N/P-SEL
Y/COMP-SEL
OSD-CS
VGL-CONT
VGH-CONT
ACC-DET
REAR-REM-IN
REM-IN
P-CONT1 … P-CONT10
BATT
GND
B-DET
RESET

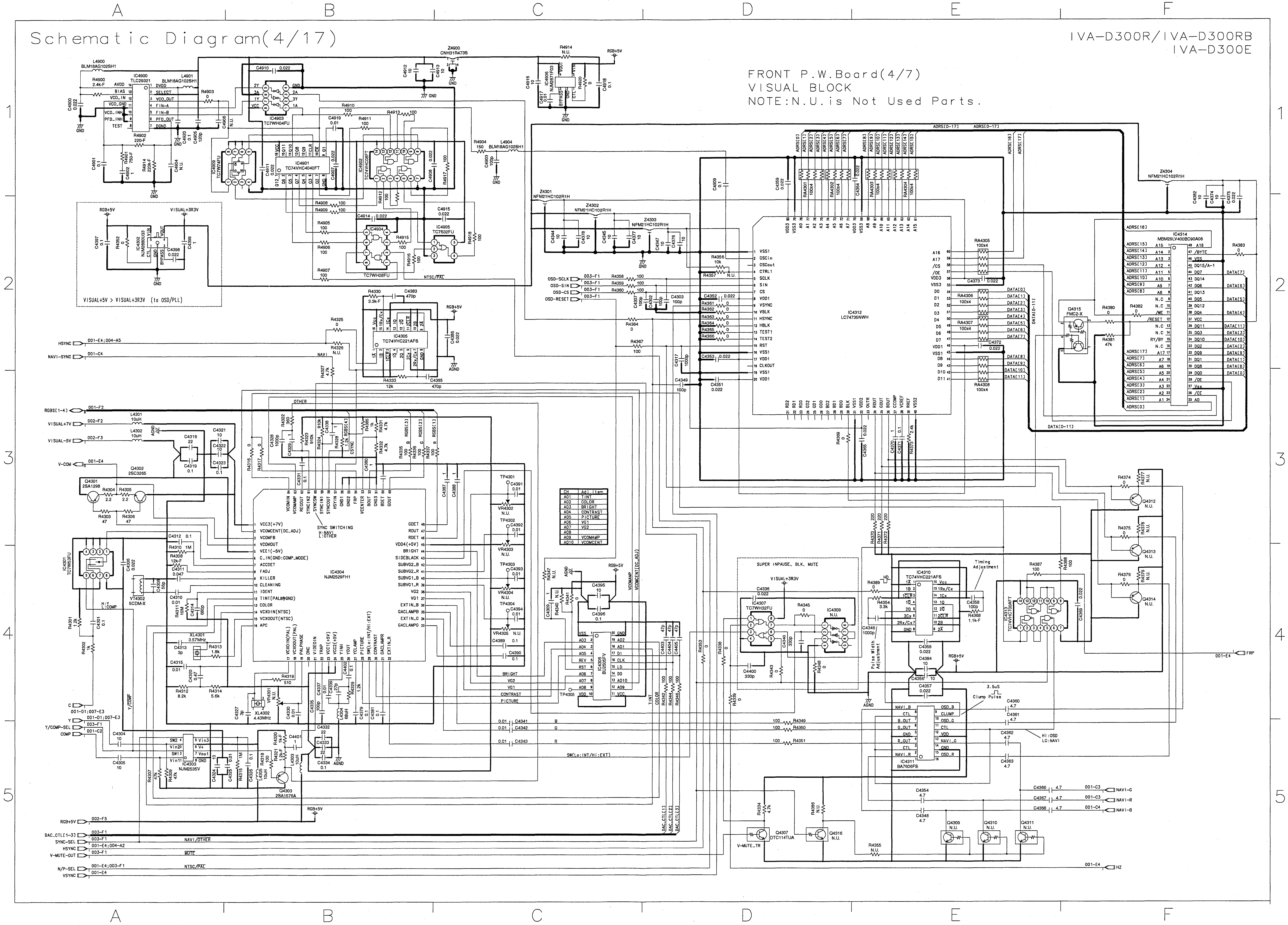
NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
%1:For IVA-D300E(Region number 3)Model Only,
&1:For IVA-D300E(Region number 4)Model Only,
Others:Common.

FRONT P.W.Board(3/7)
uCOM I/F BLOCK
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(4/17)

FRONT P.W.Board(4/7)
VISUAL BLOCK
NOTE:N.U.is Not Used Parts.

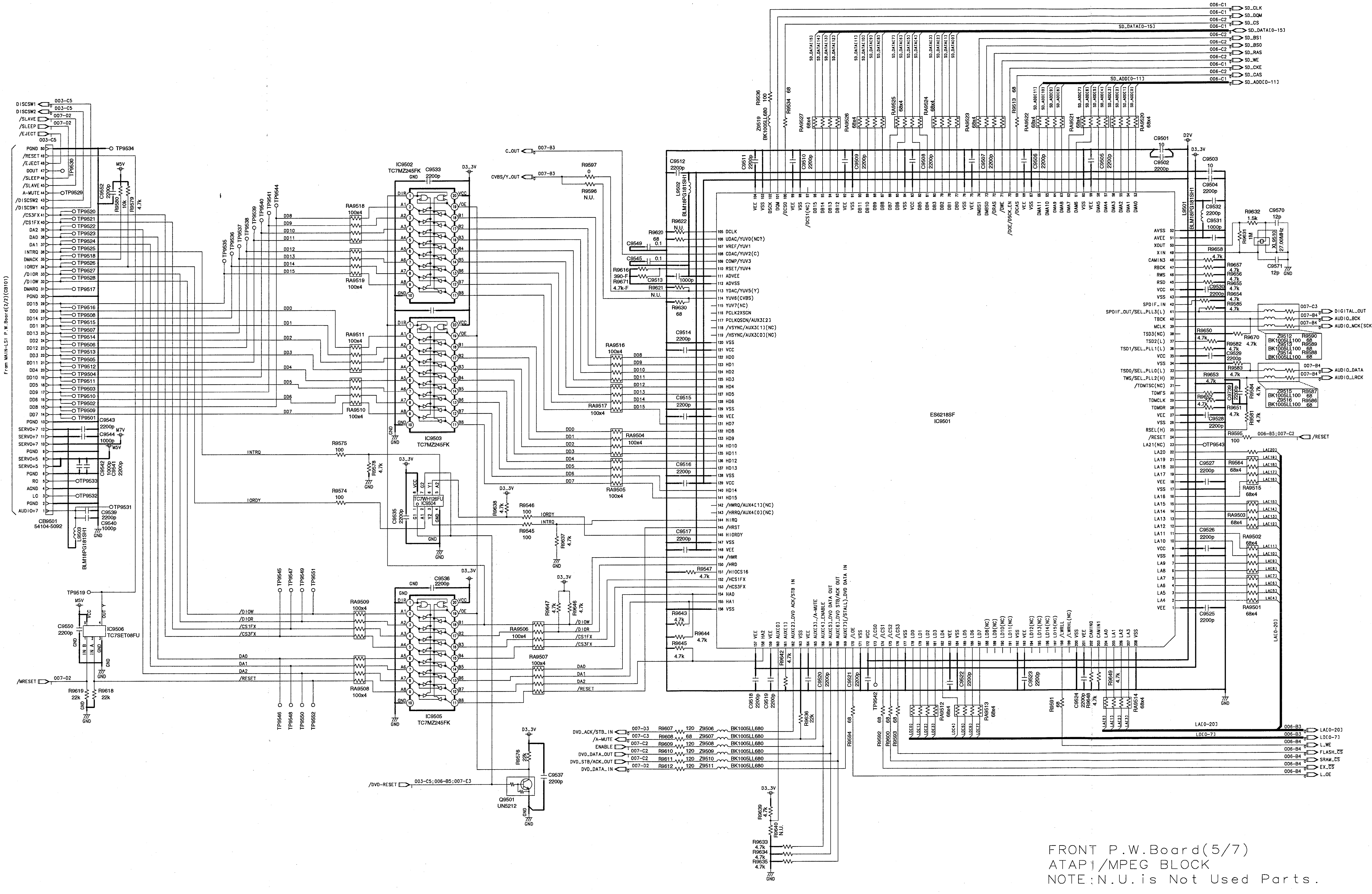

A
B
C
D
E
F
1
2
3
4
5
IC4900 TLC29321
IC4901 TC74VHC4040FT
IC4902 TC74VHC08FT
IC4903 TC7WH04FU
IC4904 TC7WH08FU
IC4905 TC7S32FU
IC4906 NJM2871F03
IC4302 NJM2880U33
IC4304 NJM2529FH1
IC4305 TC74VHC221AFS
IC4301 TC7W53FU
IC4303 NJM2535V
IC4306 BU2505FV
IC4307 TC7WH32FU
IC4309 N.U.
IC4310 TC74VHC221AFS
IC4311 BA7606FS
IC4312 LC74735NWH
IC4313 TC74VHC02AFT
IC4314 MBM29LV400BC90A06
Z4900 CNH31R473S
Z4301 NFM21HC102R1H
Z4302 NFM21HC102R1H
Z4303 NFM21HC102R1H
Z4304 NFM21HC102R1H
L4900 BLM18AG102SH1
L4901 BLM18AG102SH1
L4904 BLM18AG102SH1
L4301 10uH
L4302 10uH
XL4301 3.57MHz
XL4302 4.43MHz
VT4302 SCDM-X
Q4301 2SA1298
Q4302 2SC3265
Q4303 2SA1576A
Q4307 DTC114TUA
Q4315 FMC2-X
Q4309 N.U.
Q4310 N.U.
Q4311 N.U.
Q4312 N.U.
Q4313 N.U.
Q4314 N.U.
Q4316 N.U.
RGB+5V
VISUAL+3R3V
VISUAL+5V > VISUAL+3R3V (to OSD/PLL)
HSYNC
NAVI-SYNC
RGBS[1-4]
VISUAL+7V
VISUAL-5V
V-COM
C
Y
Y/COMP-SEL
COMP
DAC_CTL[1-3]
SYNC-SEL
V-MUTE-OUT
N/P-SEL
VSYNC
OSD-SCLK
OSD-SIN
OSD-CS
OSD-RESET
ADRS[0-17]
DATA[0-11]
SYNC SWITCHING H:NAVI L:OTHER
SUPER INPAUSE, BLK, MUTE
Timing Adjustment
Pulse Width Adjustment
3.5uS Clump Pulse
HI:OSD LO:NAVI
SW(Lo:INT/HI:EXT)
NAVI-G
NAVI-R
NAVI-B
FRP
HZ
V-MUTE_TR
TP4301
TP4302
TP4303
TP4304
TP4305
VR4302
VR4303
VR4304
VR4305
AGND
GND

CH	Adj.Item
A01	TINT
A02	COLOR
A03	BRIGHT
A04	CONTRAST
A05	PICTURE
A06	VG1
A07	VG2
A08	
A09	VCOMAMP
A010	VCOMCENT

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(5/17)

IVA–D300R/IVA–D300RB
IVA–D300E

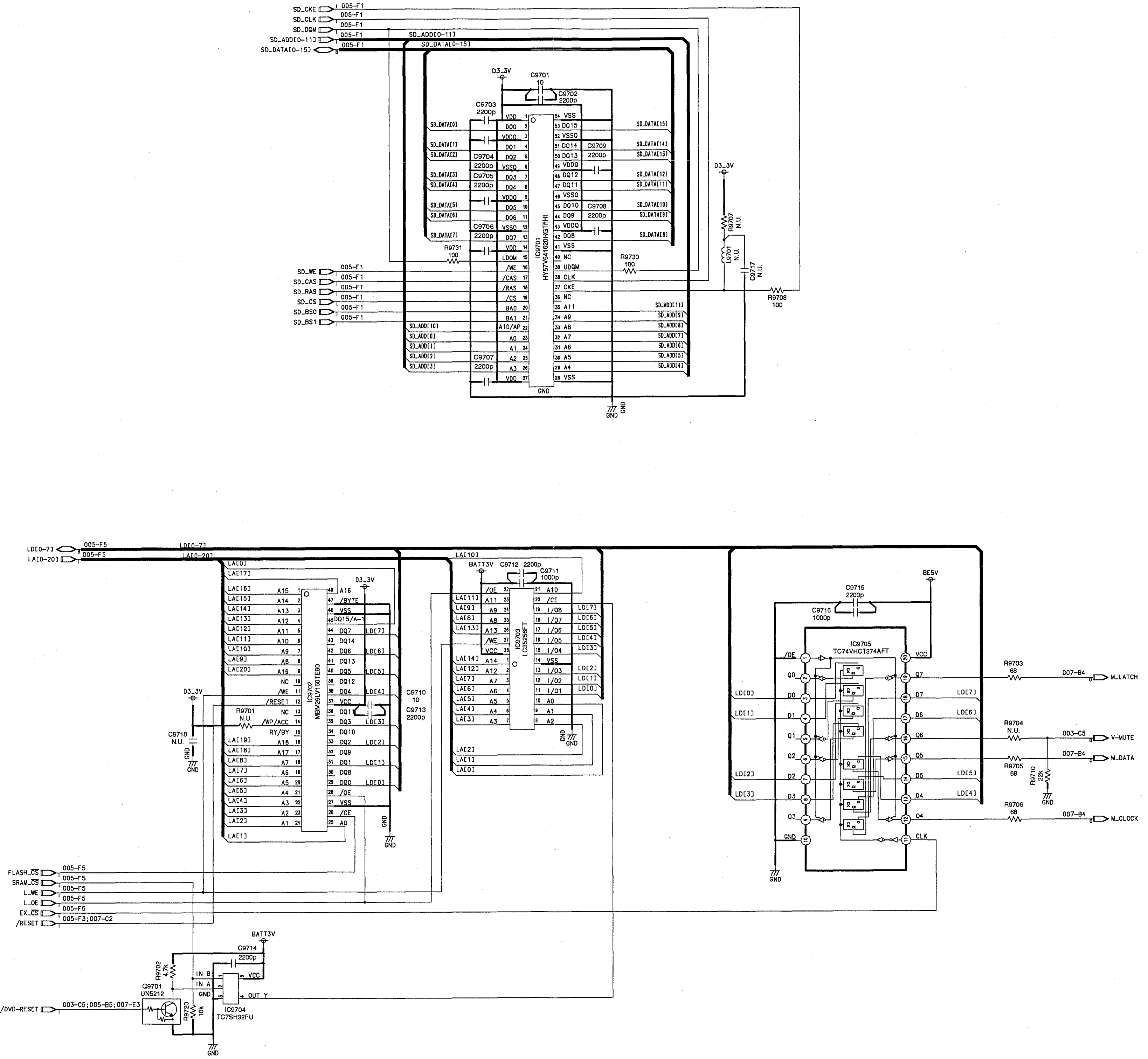


IC9501
ES6218SF
IC9502
TC7MZ245FK
IC9503
TC7MZ245FK
IC9504
TC7WH126FU
IC9505
TC7MZ245FK
IC9506
TC7SET08FU
Q9501
UN5212
CB9501
54104-5092
X9501
27.000MHz
From MAIN-LSI P.W.Board(2/2)[CB101]
SD_DATA[0-15]
SD_ADD[0-11]
LA[0-20]
LD[0-7]
DIGITAL_OUT
AUDIO_BCK
AUDIO_MCK(SCK)
AUDIO_DATA
AUDIO_LRCK
/RESET
/MRESET
/DVD-RESET
C_OUT
CVBS/Y_OUT
DVD_ACK/STB_IN
/A-MUTE
ENABLE
DVD_DATA_OUT
DVD_STB/ACK_OUT
DVD_DATA_IN
L_WE
FLASH_CS
SRAM_CS
EX_CS
L_OE
D3_3V
D2V
M5V
GND

FRONT P.W.Board(5/7)
ATAPI/MPEG BLOCK
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(6/17)

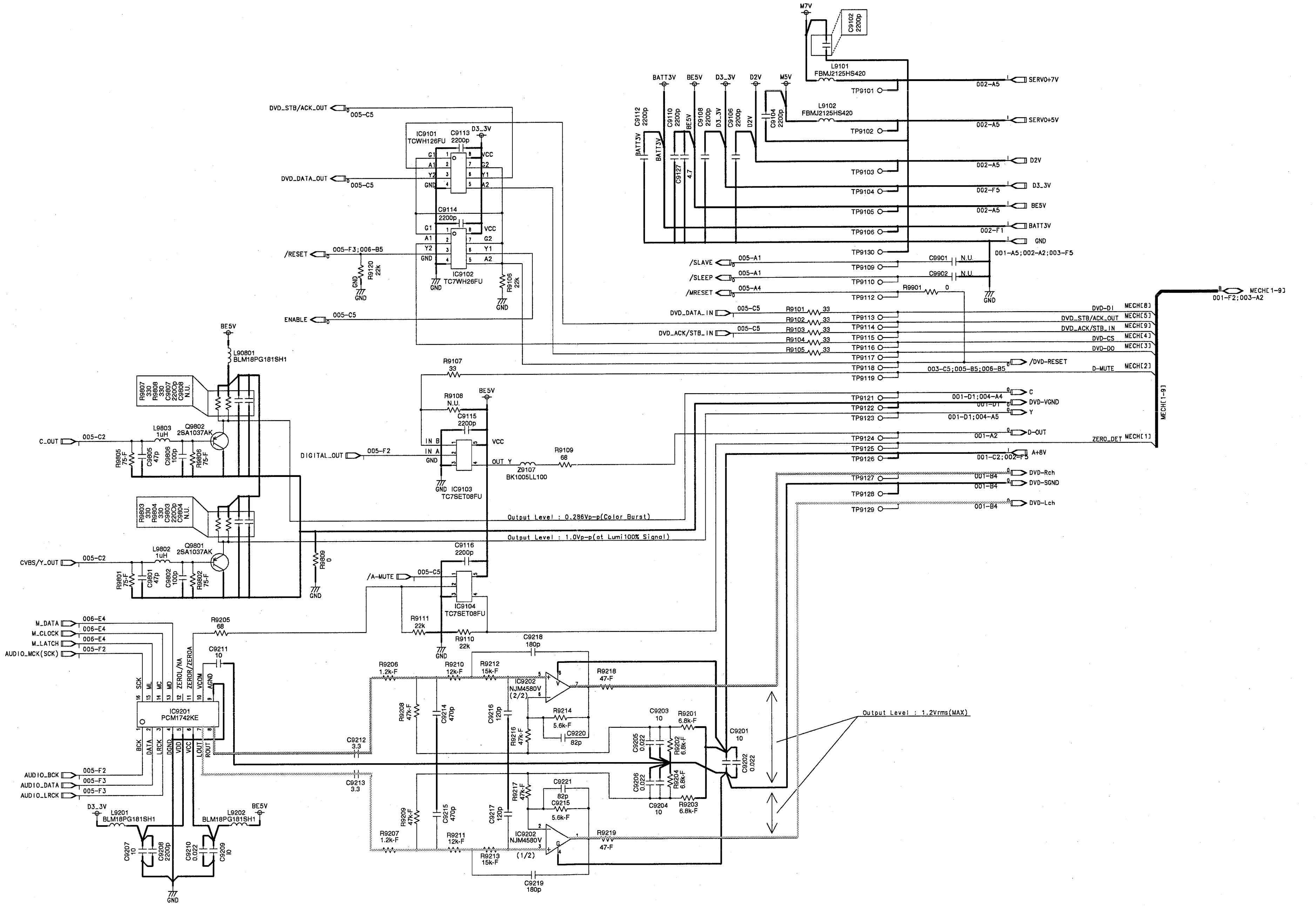

SD_CKE
SD_CLK
SD_DQM
SD_ADD[0-11]
SD_DATA[0-15]
005-F1
D3_3V
C9701
10
C9702
2200p
C9703
2200p
C9704
2200p
C9705
2200p
C9706
2200p
C9707
2200p
C9708
2200p
C9709
2200p
IC9701
HY57V641620HGTfHI
R9731
100
R9730
100
R9707
N.U.
L9701
N.U.
C9717
N.U.
R9708
100
SD_WE
SD_CAS
SD_RAS
SD_CS
SD_BS0
SD_BS1
GND
LD[0-7]
LA[0-20]
005-F5
IC9702
MBM29LV160TE90
R9701
N.U.
C9718
N.U.
C9710
10
C9713
2200p
BATT3V
C9712
2200p
C9711
1000p
IC9703
LC35256FT
FLASH_CS
SRAM_CS
L_WE
L_OE
EX_CS
/RESET
005-F3;007-C2
C9714
2200p
R9702
4.7K
Q9701
UN5212
R9720
10K
IC9704
TC7SH32FU
/DVD-RESET
003-C5;005-B5;007-E3
BE5V
C9715
2200p
C9716
1000p
IC9705
TC74VHCT374AFT
R9703
68
R9704
N.U.
R9705
68
R9706
68
R9710
22K
007-B4
003-C5
M_LATCH
V-MUTE
M_DATA
M_CLOCK

FRONT P.W.Board(6/7)
STRAGE BLOCK
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(7/17)

IVA−D300R/IVA−D300RB
IVA−D300E


A
B
C
D
E
F
1
2
3
4
5
M7V
C9102
2200p
L9101
FBMJ2125HS420
L9102
FBMJ2125HS420
BATT3V
BE5V
D3_3V
D2V
M5V
C9112
2200p
C9110
2200p
C9108
2200p
C9106
2200p
C9104
2200p
C9127
4.7
TP9101
TP9102
TP9103
TP9104
TP9105
TP9106
TP9130
TP9109
TP9110
TP9112
TP9113
TP9114
TP9115
TP9116
TP9117
TP9118
TP9119
TP9121
TP9122
TP9123
TP9124
TP9125
TP9126
TP9127
TP9128
TP9129
002-A5
SERVO+7V
SERVO+5V
D2V
002-F5
D3_3V
BE5V
002-F1
BATT3V
GND
001-A5;002-A2;003-F5
/SLAVE
/SLEEP
/MRESET
005-A1
005-A4
C9901
C9902
N.U.
R9901
0
MECH[1-9]
001-F2;003-A2
DVD_DATA_IN
DVD_ACK/STB_IN
005-C5
R9101
R9102
R9103
R9104
R9105
33
DVD-DI
DVD_STB/ACK_OUT
DVD_ACK/STB_IN
DVD-CS
DVD-DO
MECH[8]
MECH[5]
MECH[9]
MECH[4]
MECH[3]
MECH[2]
MECH[1]
/DVD-RESET
003-C5;005-B5;006-B5
D-MUTE
C
DVD-VGND
Y
001-D1;004-A4
001-D1
001-D1;004-A5
D-OUT
001-A2
ZERO_DET
A+8V
001-C2;002-F5
DVD-Rch
DVD-SGND
DVD-Lch
001-B4
DVD_STB/ACK_OUT
DVD_DATA_OUT
IC9101
TCWH126FU
C9113
2200p
C9114
2200p
G1
A1
Y2
G2
Y1
A2
VCC
/RESET
005-F3;006-B5
R9120
22k
IC9102
TC7WH26FU
R9106
22k
ENABLE
BE5V
L90801
BLM18PG181SH1
R9807
330
R9808
330
C9807
2200p
C9808
N.U.
L9803
1uH
Q9802
2SA1037AK
C_OUT
005-C2
R9805
75-F
C9805
47p
C9806
100p
R9806
75-F
R9803
330
R9804
330
C9803
2200p
C9804
N.U.
L9802
1uH
Q9801
2SA1037AK
CVBS/Y_OUT
R9801
75-F
C9801
47p
C9802
100p
R9802
75-F
R9809
0
R9107
33
R9108
N.U.
C9115
2200p
IN B
IN A
OUT Y
DIGITAL_OUT
005-F2
IC9103
TC7SET08FU
Z9107
BK1005LL100
R9109
68
Output Level : 0.286Vp-p(Color Burst)
Output Level : 1.0Vp-p(at Lumi100% Signal)
C9116
2200p
/A-MUTE
IC9104
TC7SET08FU
R9111
22k
R9110
22k
M_DATA
M_CLOCK
M_LATCH
AUDIO_MCK(SCK)
006-E4
R9205
68
C9211
10
SCK
ML
MC
MD
ZEROL/NA
ZEROR/ZEROA
VCOM
AGND
IC9201
PCM1742KE
BCK
DATA
LRCK
DGND
VDD
VCC
LOUT
ROUT
AUDIO_BCK
AUDIO_DATA
AUDIO_LRCK
005-F3
L9201
BLM18PG181SH1
L9202
BLM18PG181SH1
C9207
10
C9208
2200p
C9210
0.022
C9209
10
C9212
3.3
C9213
3.3
R9206
1.2k-F
R9207
1.2k-F
R9208
47k-F
R9209
47k-F
C9214
470p
C9215
470p
R9210
12k-F
R9211
12k-F
R9212
15k-F
R9213
15k-F
C9216
120p
C9217
120p
C9218
180p
C9219
180p
IC9202
NJM4580V
(2/2)
(1/2)
R9214
5.6k-F
C9220
82p
C9221
82p
R9216
47k-F
R9217
47k-F
R9218
47-F
R9219
47-F
C9203
10
C9204
10
C9205
0.022
C9206
0.022
R9201
6.8k-F
R9202
6.8k-F
R9203
6.8k-F
R9204
6.8k-F
C9201
10
C9202
0.022
Output Level : 1.2Vrms(MAX)

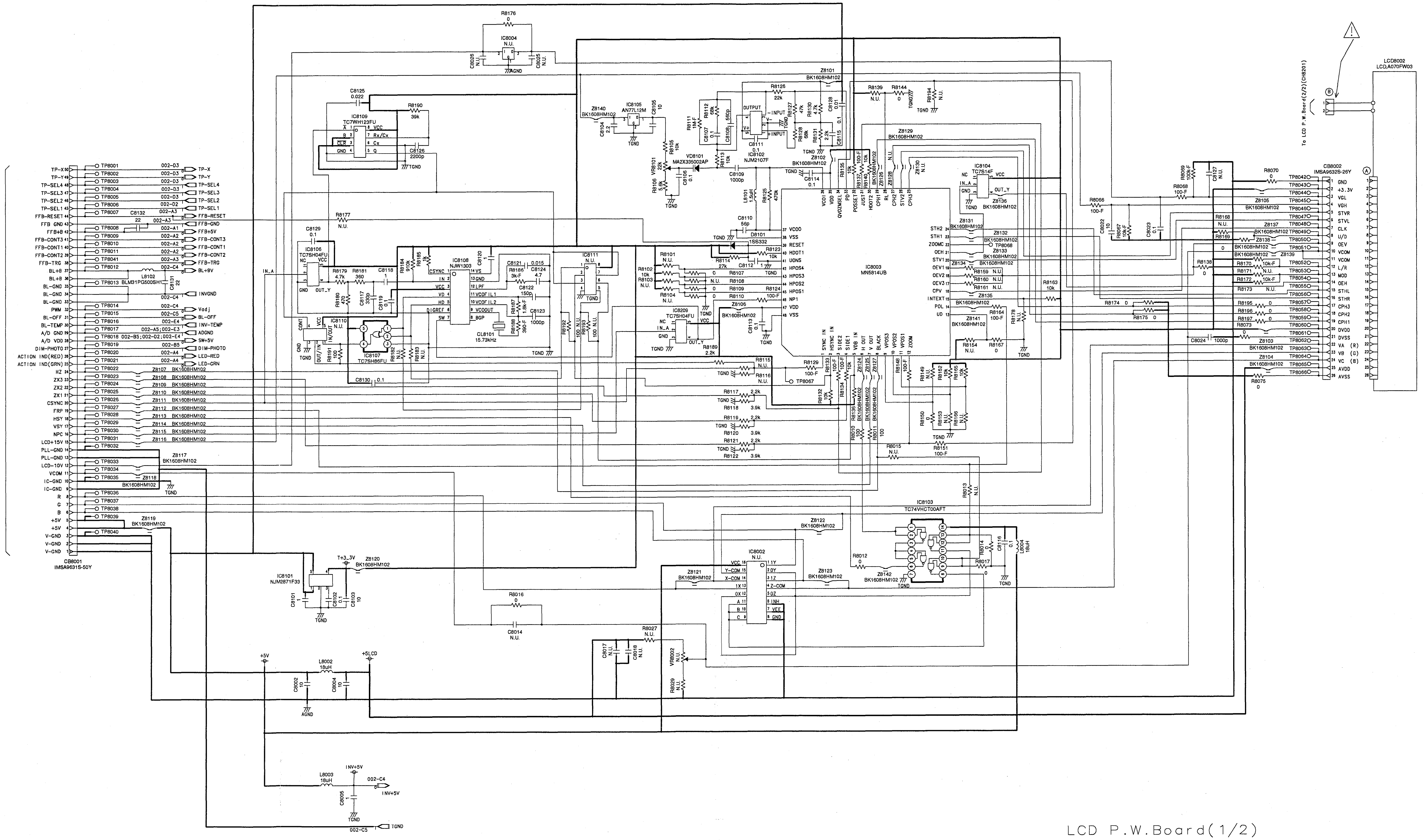
FRONT P.W.Board(7/7)
HOST I/F BLOCK
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(8/17)

IVA-D300R/IVA-D300RB
IVA-D300E

Caution: The part marked with ⚠ is generating a high voltage, so care will be necessary when working.



1
2
3
4
5
From FPC,MAIN RAD300 P.W.Board(D)
CB8001
IMSA9631S-50Y
IC8109
TC7WH123FU
IC8104
AN77L12M
VD8101
MA2X335002AP
IC8102
NJM2107F
IC8106
TC7SH04FU
IC8108
NJW1303
IC8111
N.U.
IC8107
TC7SH86FU
IC8110
N.U.
CL8101
15.73kHz
IC8003
MN5814UB
IC8209
TC7SH04FU
IC8104
TC7S14F
IC8004
N.U.
IC8101
NJM2871F33
IC8002
N.U.
IC8103
TC74VHCT00AFT
L8002
18uH
L8003
18uH
L8004
18uH
+5V
+5LCD
INV+5V
TGND
AGND
To LCD P.W.Board(2/2)(CN8201)
LCD8002
LCD,A070FW03
CB8002
IMSA9632S-26Y
GND
+3.3V
VGL
VGH
STVR
STVL
CLK
U/D
OEV
VCOM
VCOM
L/R
MOD
OEH
STHL
STHR
CPH3
CPH2
CPH1
DVDD
DVSS
VA (R)
VB (G)
VC (B)
AVDD
AVSS

LCD P.W.Board(1/2)
LCD CONTROL BLOCK

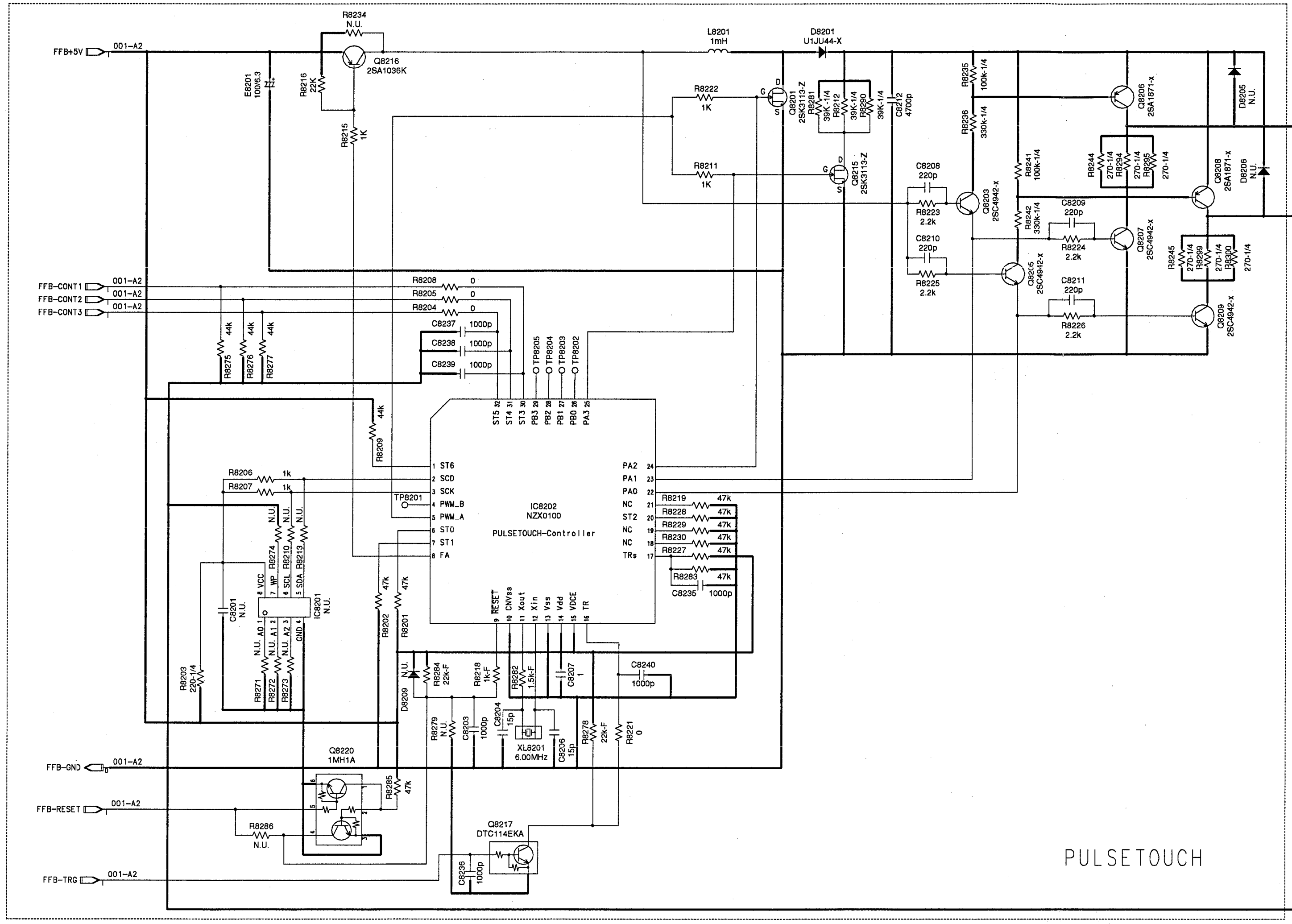
NOTE: N.U. is Not Used Parts.

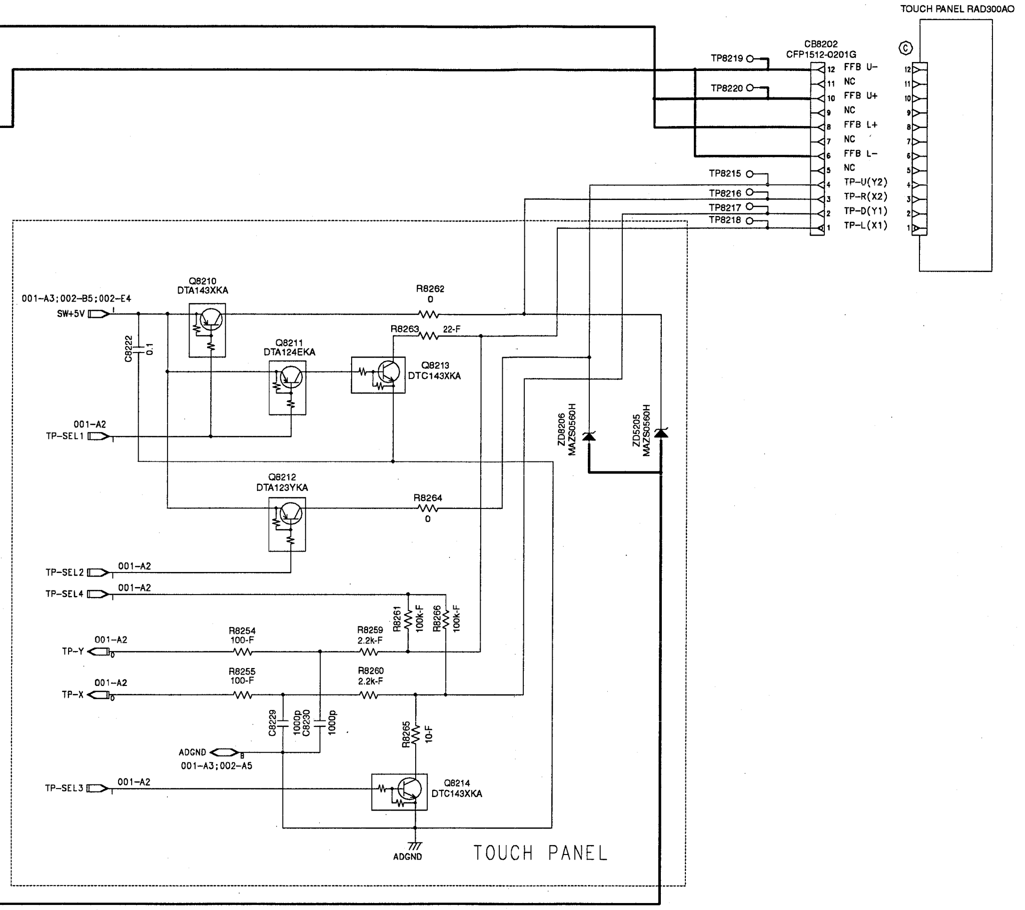
TO P. W. BOARD TO PARTS LIST TO CONTENTS

Schematic Diagram(9/17)

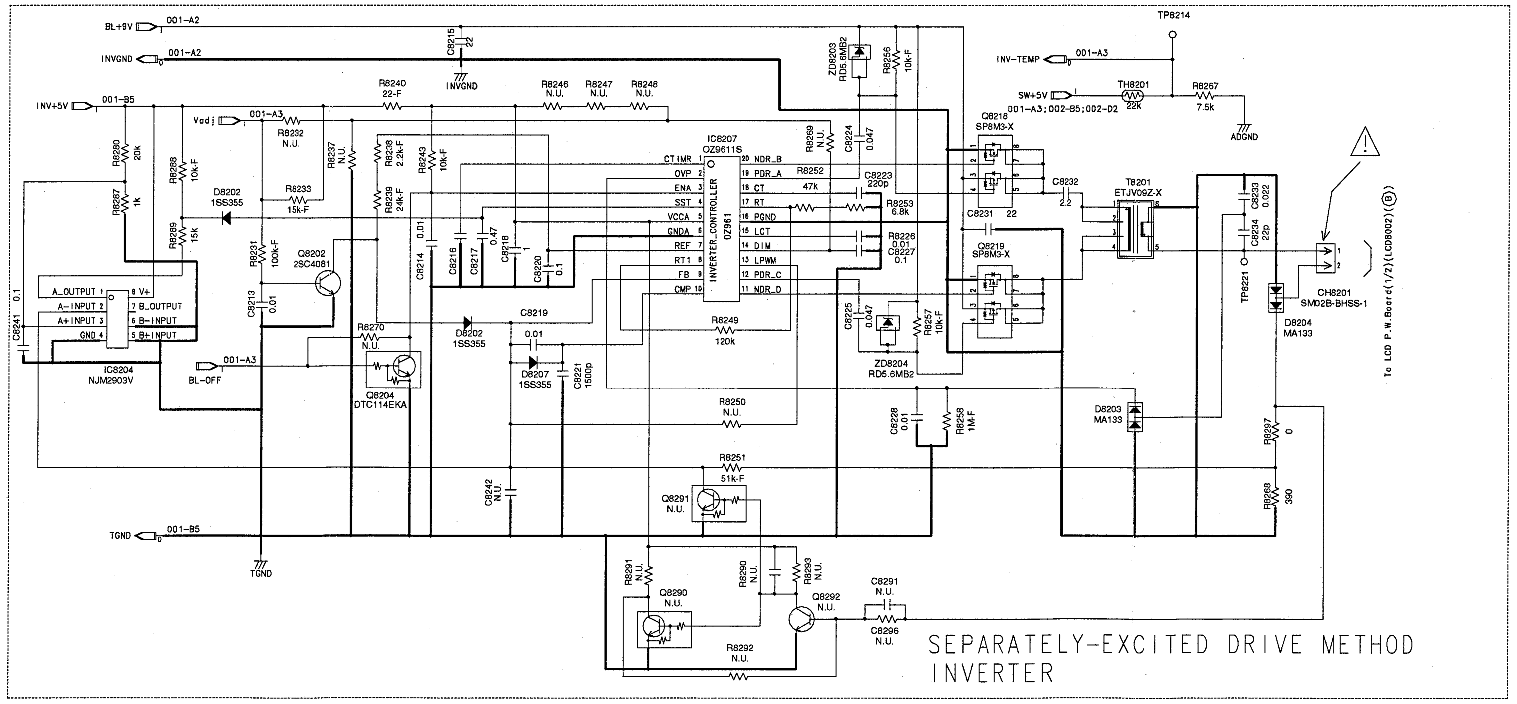
IVA–D300R/IVA–D300RB
IVA–D300E

Caution:The part marked with ⚠ is generating a high voltage, so care will be necessary when working.

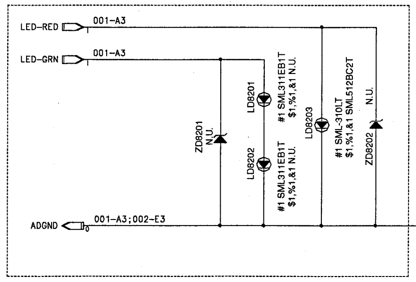

PULSETOUCH
FFB+5V
FFB-CONT1
FFB-CONT2
FFB-CONT3
FFB-GND
FFB-RESET
FFB-TRG
IC8202
NZX0100
PULSETOUCH-Controller
Q8216
2SA1036K
L8201
1mH
D8201
U1JU44-X
Q8201
2SK3113-Z
Q8215
2SK3113-Z
Q8203
2SC4942-x
Q8205
2SA1871-x
Q8206
2SA1871-x
Q8207
2SC4942-x
Q8208
2SA1871-x
Q8209
2SC4942-x
Q8220
1MH1A
Q8217
DTC114EKA
XL8201
6.00MHz
IC8201
N.U.
TP8201


TOUCH PANEL RAD300AO
CB8202
CFP1512-0201G
FFB U-
NC
FFB U+
NC
FFB L+
NC
FFB L-
NC
TP-U(Y2)
TP-R(X2)
TP-D(Y1)
TP-L(X1)
TP8219
TP8220
TP8215
TP8216
TP8217
TP8218
SW+5V
TP-SEL1
TP-SEL2
TP-SEL4
TP-Y
TP-X
TP-SEL3
ADGND
Q8210
DTA143XKA
Q8211
DTA124EKA
Q8213
DTC143XKA
Q8212
DTA123YKA
Q8214
DTC143XKA
ZD8205
MAZS056GH
ZD8205
MAZS056GH
TOUCH PANEL

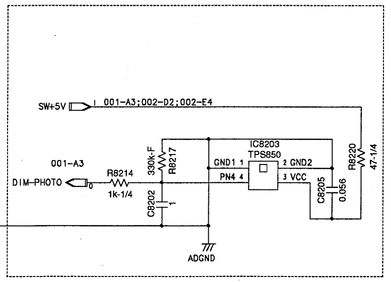
NOTE:#1:For IVA–D300R(Region number 2)Model Only,
$1:For IVA–D300RB(Region number 2)Model Only,
%1:For IVA–D300E(Region number 3)Model Only,
&1:For IVA–D300E(Region number 4)Model Only,
Others:Common.


BL+9V
INVGND
INV+5V
BL-OFF
TGND
INV-TEMP
SW+5V
TP8214
TH8201
IC8207
OZ9611S
INVERTER_CONTROLLER
IC8204
NJM2903V
Q8202
2SC4081
Q8204
DTC114EKA
Q8218
SP8M3-X
Q8219
SP8M3-X
T8201
ETJV09Z-X
CH8201
SM02B-BHSS-1
D8204
MA133
D8203
MA133
ZD8204
RD6.8MB2
ZD8203
RD5.6MB2
D8202
1SS355
D8207
1SS355
Q8291
N.U.
Q8290
N.U.
Q8292
N.U.
To LCD P.W.Board(1/2)(LCD8002)(B)
SEPARATELY-EXCITED DRIVE METHOD
INVERTER

Action Indicater


LED-RED
LED-GRN
ADGND
001-A3;002-E3
LD8201
LD8202
LD8203
ZD8201
ZD8202
#1 SML311EB1T
$1,%1,&1 N.U.
#1 SML310LT
$1,%1,&1 SML512BC2T

Dimmer Sensor

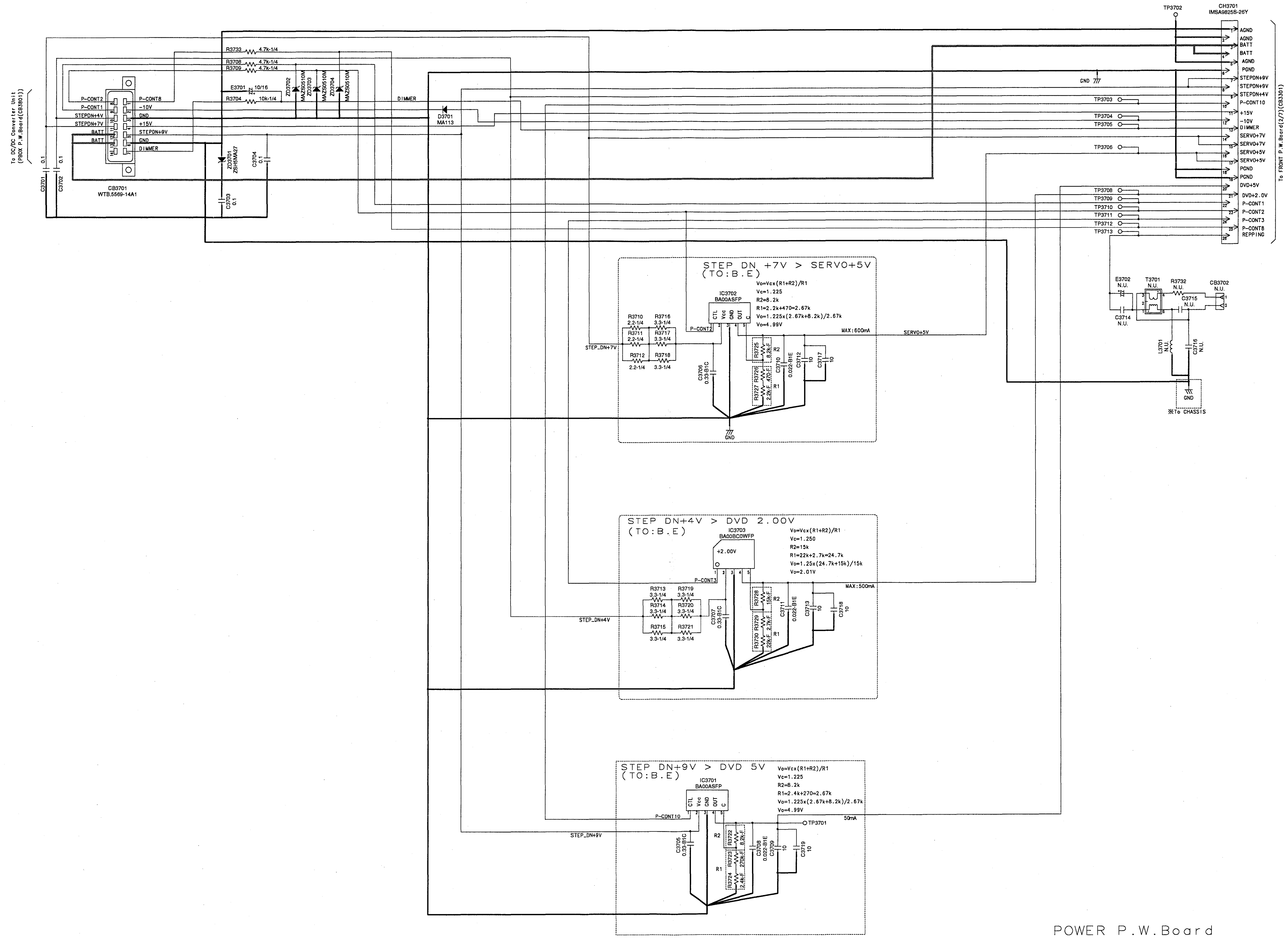

SW+5V
001-A3;002-D2;002-E4
DIM-PHOTO
IC8203
TPS850
R8214
1k-1/4
R8217
330k-F
C8202
C8205
0.056
R8220
47-1/4
ADGND

LCD P.W.Board(2/2)
BL INVERTER/PULSETOUCH/TOUCH PANEL BLOCK
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD TO PARTS LIST TO CONTENTS

Schematic Diagram(10/17)

IVA–D300R/IVA–D300RB
IVA–D300E

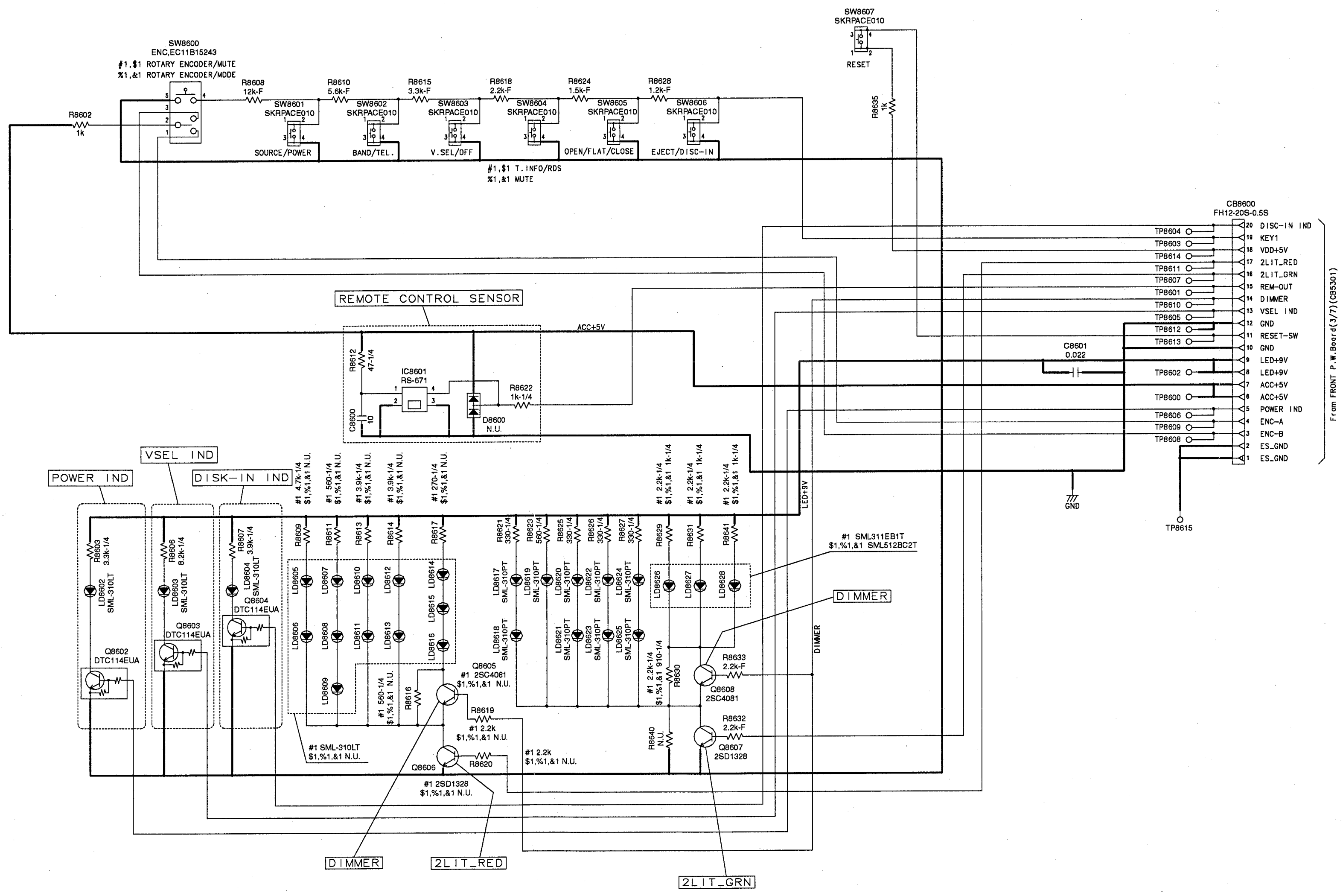

To DC/DC Converter Unit (PBOX P.W.Board(CB3801))
CB3701
WTB,5569-14A1
P–CONT2
P–CONT1
STEPDN+4V
STEPDN+7V
BATT
BATT
P–CONT8
–10V
GND
+15V
STEPDN+9V
GND
DIMMER
C3701 0.1
C3702 0.1
R3733 4.7k-1/4
R3708 4.7k-1/4
R3709 4.7k-1/4
E3701 10/16
R3704 10k-1/4
ZD3702 MAZS0510M
ZD3703 MAZS0510M
ZD3704 MAZS0510M
ZD3701 ZSH5MA27
C3703 0.1
C3704 0.1
DIMMER
D3701 MA113
TP3702
CH3701
IMSA9825S-26Y
AGND
AGND
BATT
BATT
AGND
PGND
STEPDN+9V
STEPDN+9V
STEPDN+4V
P–CONT10
+15V
–10V
DIMMER
SERVO+7V
SERVO+7V
SERVO+5V
SERVO+5V
PGND
PGND
DVD+5V
DVD+2.0V
P–CONT1
P–CONT2
P–CONT3
P–CONT8
REPPING
To FRONT P.W.Board(2/7)(CB3301)
GND
TP3703
TP3704
TP3705
TP3706
TP3708
TP3709
TP3710
TP3711
TP3712
TP3713
E3702 N.U.
T3701 N.U.
R3732 N.U.
CB3702 N.U.
C3715 N.U.
C3714 N.U.
L3701 N.U.
C3716 N.U.
GND
※To CHASSIS
STEP DN +7V > SERVO+5V
(TO:B.E)
IC3702
BA00ASFP
CTL Vcc GND OUT C
Vo=Vcx(R1+R2)/R1
Vc=1.225
R2=8.2k
R1=2.2k+470=2.67k
Vo=1.225x(2.67k+8.2k)/2.67k
Vo=4.99V
MAX:600mA
SERVO+5V
P–CONT2
STEP_DN+7V
R3710 2.2-1/4
R3711 2.2-1/4
R3712 2.2-1/4
R3716 3.3-1/4
R3717 3.3-1/4
R3718 3.3-1/4
C3706 0.33-B1C
R3725 8.2k-F R2
R3726 470-F
R3727 2.2k-F R1
C3710 0.022-B1E
C3712 10
C3717 10
GND
STEP DN+4V > DVD 2.00V
(TO:B.E)
IC3703
BA00BC0WFP
+2.00V
Vo=Vcx(R1+R2)/R1
Vc=1.250
R2=15k
R1=22k+2.7k=24.7k
Vo=1.25x(24.7k+15k)/15k
Vo=2.01V
MAX:500mA
P–CONT3
STEP_DN+4V
R3713 3.3-1/4
R3714 3.3-1/4
R3715 3.3-1/4
R3719 3.3-1/4
R3720 3.3-1/4
R3721 3.3-1/4
C3707 0.33-B1C
R3728 15k-F R2
R3729 2.7k-F
R3730 22k-F R1
C3711 0.022-B1E
C3713 10
C3718 10
STEP DN+9V > DVD 5V
(TO:B.E)
IC3701
BA00ASFP
CTL Vcc GND OUT C
Vo=Vcx(R1+R2)/R1
Vc=1.225
R2=8.2k
R1=2.4k+270=2.67k
Vo=1.225x(2.67k+8.2k)/2.67k
Vo=4.99V
50mA
TP3701
P–CONT10
STEP_DN+9V
C3705 0.33-B1C
R3722 8.2k-F R2
R3723 270k-F
R3724 2.4k-F R1
C3708 0.022-B1E
C3709 10
C3719 10

POWER P.W.Board
2F POWER BLOCK
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(11/17)

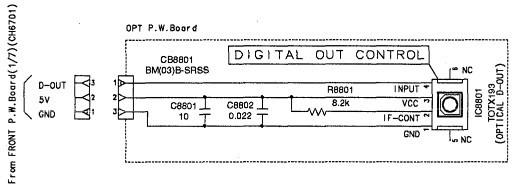
NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
%1:For IVA-D300E(Region number 3)Model Only,
&1:For IVA-D300E(Region number 4)Model Only,
Others:Common.

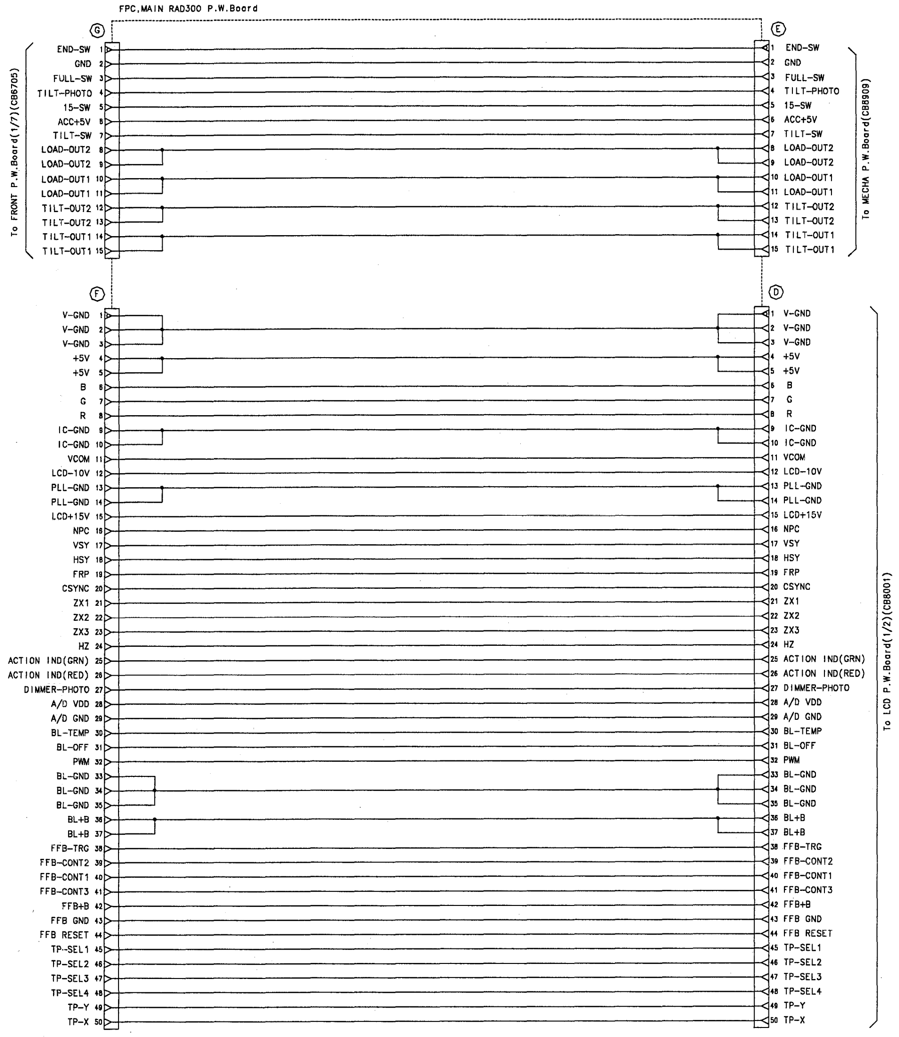

SW8600
ENC,EC11B15243
#1,$1 ROTARY ENCODER/MUTE
%1,&1 ROTARY ENCODER/MODE
R8602 1k
R8608 12k-F
R8610 5.6k-F
R8615 3.3k-F
R8618 2.2k-F
R8624 1.5k-F
R8628 1.2k-F
SW8601 SKRPACE010
SW8602 SKRPACE010
SW8603 SKRPACE010
SW8604 SKRPACE010
SW8605 SKRPACE010
SW8606 SKRPACE010
SOURCE/POWER
BAND/TEL.
V.SEL/OFF
#1,$1 T.INFO/RDS
%1,&1 MUTE
OPEN/FLAT/CLOSE
EJECT/DISC-IN
SW8607
SKRPACE010
RESET
R8635 1k
REMOTE CONTROL SENSOR
ACC+5V
R8612 47-1/4
IC8601 RS-671
C8600 10
R8622 1k-1/4
D8600 N.U.
C8601 0.022
GND
CB8600
FH12-20S-0.5S
TP8604
TP8603
TP8614
TP8611
TP8607
TP8601
TP8610
TP8605
TP8612
TP8613
TP8602
TP8600
TP8606
TP8609
TP8608
TP8615
20 DISC-IN IND
19 KEY1
18 VDD+5V
17 2LIT_RED
16 2LIT_GRN
15 REM-OUT
14 DIMMER
13 VSEL IND
12 GND
11 RESET-SW
10 GND
9 LED+9V
8 LED+9V
7 ACC+5V
6 ACC+5V
5 POWER IND
4 ENC-A
3 ENC-B
2 ES_GND
1 ES_GND
From FRONT P.W.Board(3/7)(CB5301)
POWER IND
VSEL IND
DISK-IN IND
R8603 3.3k-1/4
LD8602 SML-310LT
Q8602 DTC114EUA
R8606 8.2k-1/4
LD8603 SML-310LT
Q8603 DTC114EUA
R8607 3.9k-1/4
LD8604 SML-310LT
Q8604 DTC114EUA
R8609 #1 4.7k-1/4 $1,%1,&1 N.U.
R8611 #1 560-1/4 $1,%1,&1 N.U.
R8613 #1 3.9k-1/4 $1,%1,&1 N.U.
R8614 #1 3.9k-1/4 $1,%1,&1 N.U.
R8617 #1 270-1/4 $1,%1,&1 N.U.
LD8605
LD8606
LD8607
LD8608
LD8609
LD8610
LD8611
LD8612
LD8613
LD8614
LD8615
LD8616
#1 SML-310LT
$1,%1,&1 N.U.
R8616 #1 560-1/4 $1,%1,&1 N.U.
Q8605 #1 2SC4081 $1,%1,&1 N.U.
R8619 #1 2.2k $1,%1,&1 N.U.
Q8606 #1 2SD1328 $1,%1,&1 N.U.
R8620 #1 2.2k $1,%1,&1 N.U.
R8621 330-1/4
R8623 560-1/4
R8625 330-1/4
R8626 330-1/4
R8627 330-1/4
LD8617 SML-310PT
LD8618 SML-310PT
LD8619 SML-310PT
LD8620 SML-310PT
LD8621 SML-310PT
LD8622 SML-310PT
LD8623 SML-310PT
LD8624 SML-310PT
LD8625 SML-310PT
R8629 #1 2.2k-1/4 $1,%1,&1 1k-1/4
R8631 #1 2.2k-1/4 $1,%1,&1 1k-1/4
R8641 #1 2.2k-1/4 $1,%1,&1 1k-1/4
LD8626
LD8627
LD8628
#1 SML311EB1T
$1,%1,&1 SML512BC2T
LED+9V
DIMMER
R8630 #1 2.2k-1/4 $1,%1,&1 910-1/4
R8633 2.2k-F
Q8608 2SC4081
R8640 N.U.
R8632 2.2k-F
Q8607 2SD1328
DIMMER
2LIT_RED
2LIT_GRN

ESC P.W.Board
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(12/17)

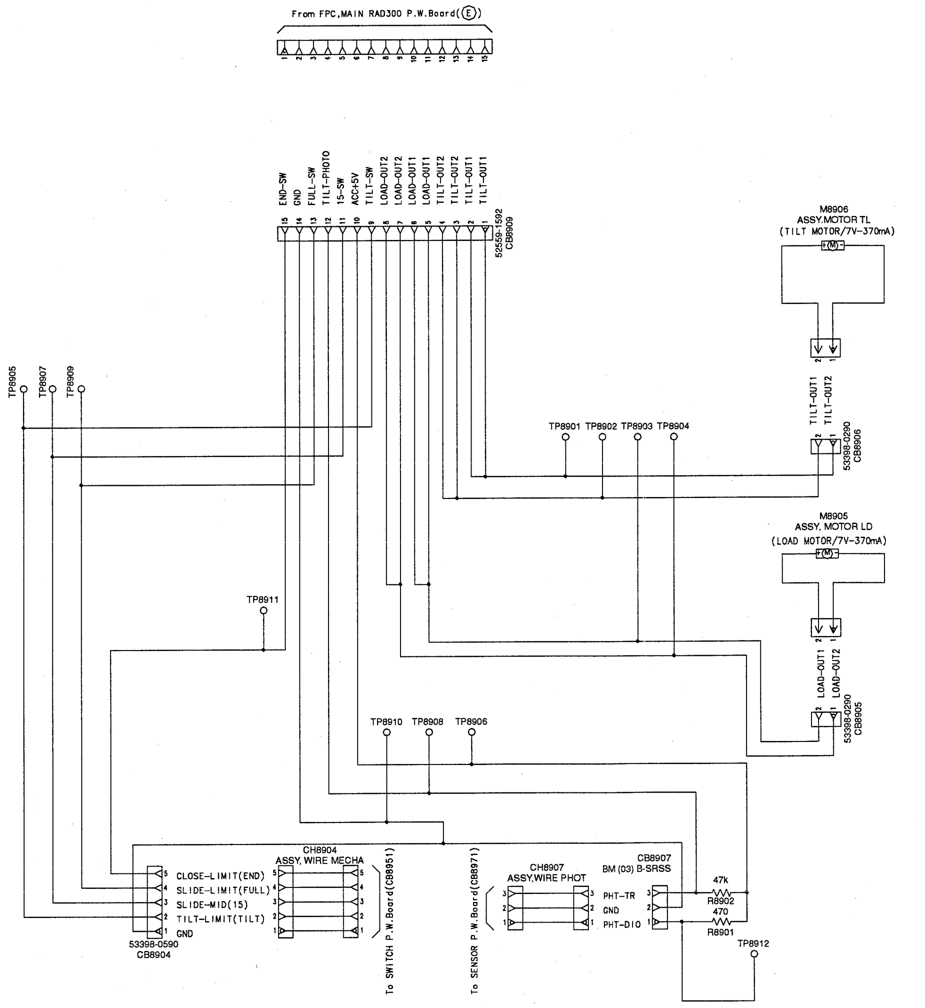

From FRONT P.W.Board(1/7)(CH6701)
D-OUT 3
5V 2
GND 1
OPT P.W.Board
CB8801
BM(03)B-SRSS
1
2
3
DIGITAL OUT CONTROL
C8801
10
C8802
0.022
R8801
8.2k
INPUT 4
VCC 3
IF-CONT 2
GND 1
6 NC
5 NC
IC8801
TOTX193
(OPTICAL D-OUT)


FPC,MAIN RAD300 P.W.Board
G
To FRONT P.W.Board(1/7)(CB6705)
END-SW 1
GND 2
FULL-SW 3
TILT-PHOTO 4
15-SW 5
ACC+5V 6
TILT-SW 7
LOAD-OUT2 8
LOAD-OUT2 9
LOAD-OUT1 10
LOAD-OUT1 11
TILT-OUT2 12
TILT-OUT2 13
TILT-OUT1 14
TILT-OUT1 15
E
1 END-SW
2 GND
3 FULL-SW
4 TILT-PHOTO
5 15-SW
6 ACC+5V
7 TILT-SW
8 LOAD-OUT2
9 LOAD-OUT2
10 LOAD-OUT1
11 LOAD-OUT1
12 TILT-OUT2
13 TILT-OUT2
14 TILT-OUT1
15 TILT-OUT1
To MECHA P.W.Board(CB8909)
F
To FRONT P.W.Board(1/7)(CB6704)
V-GND 1
V-GND 2
V-GND 3
+5V 4
+5V 5
B 6
G 7
R 8
IC-GND 9
IC-GND 10
VCOM 11
LCD-10V 12
PLL-GND 13
PLL-GND 14
LCD+15V 15
NPC 16
VSY 17
HSY 18
FRP 19
CSYNC 20
ZX1 21
ZX2 22
ZX3 23
HZ 24
ACTION IND(GRN) 25
ACTION IND(RED) 26
DIMMER-PHOTO 27
A/D VDD 28
A/D GND 29
BL-TEMP 30
BL-OFF 31
PWM 32
BL-GND 33
BL-GND 34
BL-GND 35
BL+B 36
BL+B 37
FFB-TRG 38
FFB-CONT2 39
FFB-CONT1 40
FFB-CONT3 41
FFB+B 42
FFB GND 43
FFB RESET 44
TP-SEL1 45
TP-SEL2 46
TP-SEL3 47
TP-SEL4 48
TP-Y 49
TP-X 50
D
1 V-GND
2 V-GND
3 V-GND
4 +5V
5 +5V
6 B
7 G
8 R
9 IC-GND
10 IC-GND
11 VCOM
12 LCD-10V
13 PLL-GND
14 PLL-GND
15 LCD+15V
16 NPC
17 VSY
18 HSY
19 FRP
20 CSYNC
21 ZX1
22 ZX2
23 ZX3
24 HZ
25 ACTION IND(GRN)
26 ACTION IND(RED)
27 DIMMER-PHOTO
28 A/D VDD
29 A/D GND
30 BL-TEMP
31 BL-OFF
32 PWM
33 BL-GND
34 BL-GND
35 BL-GND
36 BL+B
37 BL+B
38 FFB-TRG
39 FFB-CONT2
40 FFB-CONT1
41 FFB-CONT3
42 FFB+B
43 FFB GND
44 FFB RESET
45 TP-SEL1
46 TP-SEL2
47 TP-SEL3
48 TP-SEL4
49 TP-Y
50 TP-X
To LCD P.W.Board(1/2)(CB8001)

TO P. W. BOARD TO PARTS LIST TO CONTENTS

IVA-D300R/IVA-D300RB
IVA-D300E

Schematic Diagram(13/17)

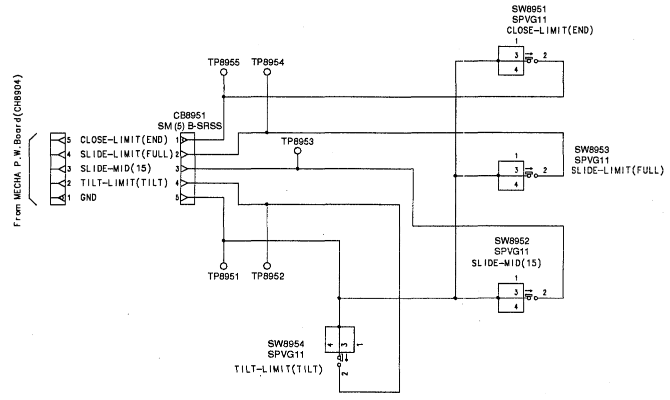

From FPC,MAIN RAD300 P.W.Board(Ⓔ)
END-SW
GND
FULL-SW
TILT-PHOTO
15-SW
ACC+5V
TILT-SW
LOAD-OUT2
LOAD-OUT2
LOAD-OUT1
LOAD-OUT1
TILT-OUT2
TILT-OUT2
TILT-OUT1
TILT-OUT1
52559-1592
CB8909
M8906
ASSY.MOTOR TL
(TILT MOTOR/7V-370mA)
TILT-OUT1
TILT-OUT2
53398-0290
CB8906
TP8901
TP8902
TP8903
TP8904
TP8905
TP8907
TP8909
TP8911
M8905
ASSY, MOTOR LD
(LOAD MOTOR/7V-370mA)
LOAD-OUT1
LOAD-OUT2
53398-0290
CB8905
TP8910
TP8908
TP8906
CH8904
ASSY, WIRE MECHA
CLOSE-LIMIT(END)
SLIDE-LIMIT(FULL)
SLIDE-MID(15)
TILT-LIMIT(TILT)
GND
53398-0590
CB8904
To SWITCH P.W.Board(CB8951)
To SENSOR P.W.Board(CB8971)
CH8907
ASSY,WIRE PHOT
CB8907
BM (03) B-SRSS
PHT-TR
GND
PHT-DIO
47k
R8902
470
R8901
TP8912

MECHA P.W.Board

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(14/17)

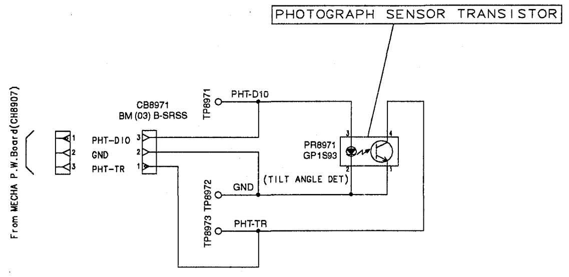
IVA-D300R/IVA-D300RB
IVA-D300E


From MECHA P.W.Board(CH8904)
5 CLOSE-LIMIT(END)
4 SLIDE-LIMIT(FULL)
3 SLIDE-MID(15)
2 TILT-LIMIT(TILT)
1 GND
CB8951
SM(5)B-SRSS
TP8955
TP8954
TP8953
TP8951
TP8952
SW8951
SPVG11
CLOSE-LIMIT(END)
SW8953
SPVG11
SLIDE-LIMIT(FULL)
SW8952
SPVG11
SLIDE-MID(15)
SW8954
SPVG11
TILT-LIMIT(TILT)

SWITCH P.W.Board

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

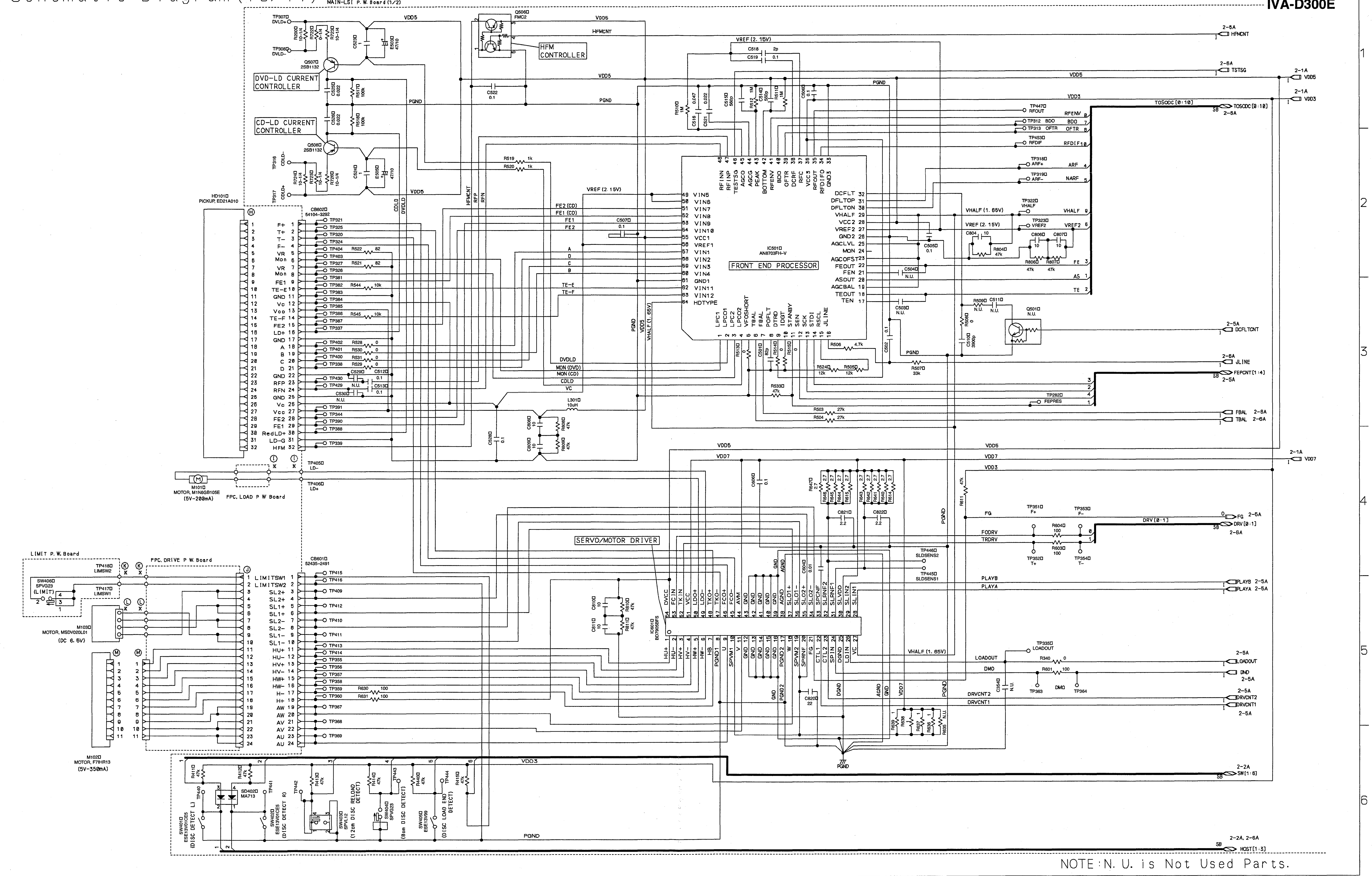
Schematic Diagram(15/17)


PHOTOGRAPH SENSOR TRANSISTOR
From MECHA P.W.Board(CH8907)
1
2
3
PHT–D10
GND
PHT–TR
CB8971
BM (03) B-SRSS
3
2
1
TP8971
PHT-D10
TP8972
GND
TP8973
PHT-TR
PR8971
GP1S93
3
4
2
1
(TILT ANGLE DET)

SENSOR P.W.Board

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram (16/17)

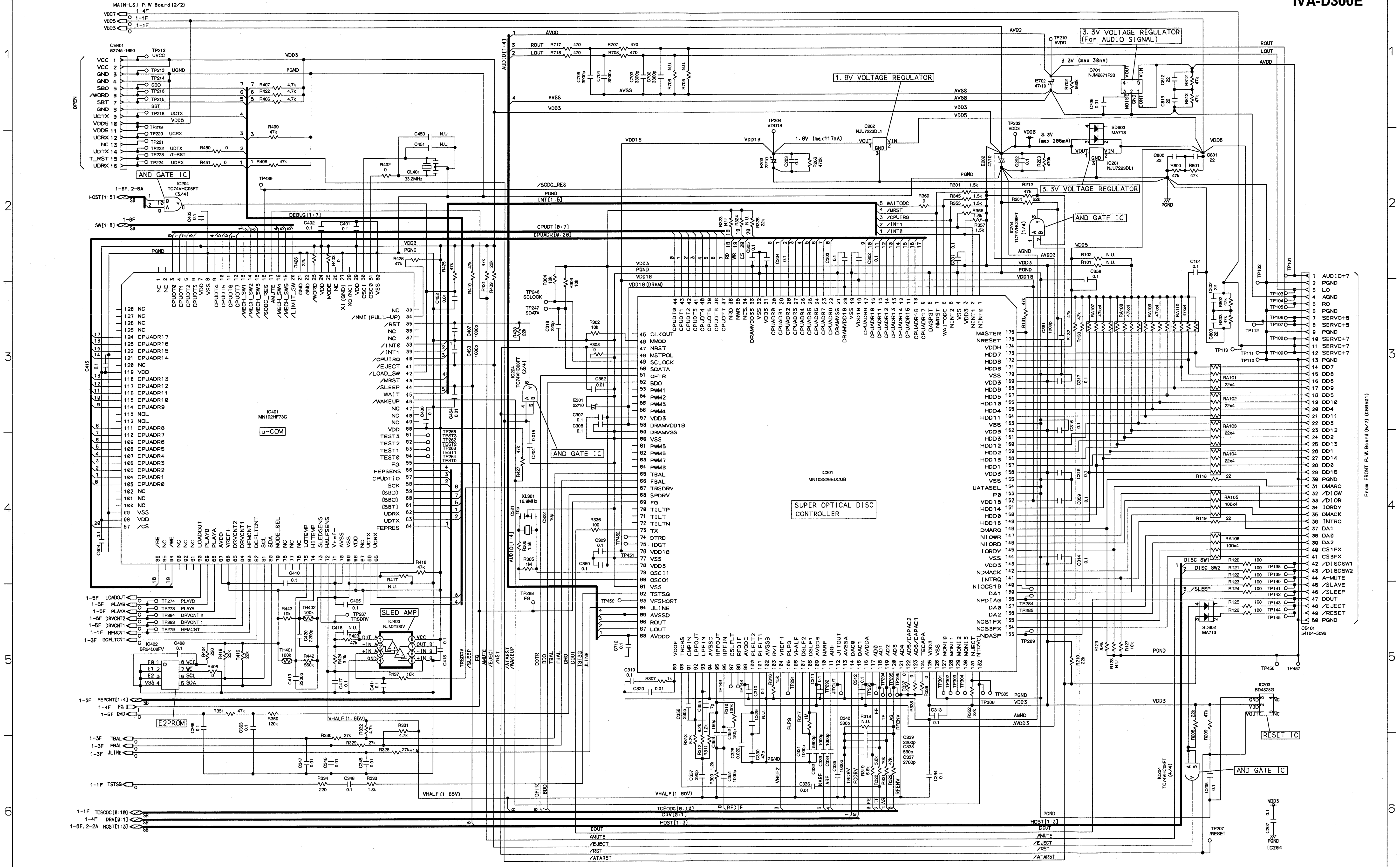

MAIN-LSI P. W. Board (1/2)
DVD-LD CURRENT CONTROLLER
CD-LD CURRENT CONTROLLER
HFM CONTROLLER
Q506 FMC2
Q507 2SB1132
Q508 2SB1132
VDD5
VDD3
VDD7
PGND
HFMCNT
TSTSG
VREF (2. 15V)
VHALF (1. 65V)
TOSCDC [0:10]
IC501 AN8703FH-V
FRONT END PROCESSOR
SERVO/MOTOR DRIVER
IC601 BD7906FS
HD101 PICKUP, ED21A010
CN602 54104-3292
CN601 52435-2491
M101 MOTOR, M1N6GB105E (5V-200mA)
FPC, LOAD P W Board
LIMIT P. W. Board
FPC, DRIVE P W Board
SW406 SPVG23 (LIMIT)
M103 MOTOR, MSDV020L01 (DC 6.5V)
M102 MOTOR, F7IHR13 (5V-350mA)
SW401 ESE13V01CE5 (DISC DETECT L)
SW402 ESE13V01CE5 (DISC DETECT R)
SW403 SPVL12 (12cm DISC RELOAD DETECT)
SW404 SPVG23 (8cm DISC DETECT)
SW405 ESE13V99 (DISC LOAD END DETECT)
SD402 MA713
Q501 N.U.
2-6A HFMCNT
2-6A TSTSG
2-1A VDD5
2-1A VDD3
2-6A TOSCDC [0:10]
2-5A DCFLTCNT
2-6A JLINE
2-5A FEPCNT [1:4]
2-6A FBAL
2-6A TBAL
2-1A VDD7
2-5A FG
2-6A DRV [0:1]
2-5A PLAYB
2-5A PLAYA
2-5A LOADOUT
2-5A DMO
2-5A DRVCNT2
2-5A DRVCNT1
2-2A SW [1:6]
2-2A, 2-6A HOST [1:3]

NOTE : N. U. is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(17/17)

IVA-D300R/IVA-D300RB
IVA-D300E


MAIN-LSI P.W Board (2/2)
CB401 52745-1690
OPEN
AND GATE IC
IC204 TC74VHC08FT (3/4)
HOST[1:5]
SW[1:8]
CL401 33.2MHz
IC401 MN102HF73G
u-COM
IC402 BR24L08FV
E2PROM
SLED AMP
IC403 NJM2100V
TH401 100k
TH402 100k
AUDIO[1:4]
1.8V VOLTAGE REGULATOR
IC202 NJU7223DL1
1.8V (max117mA)
3.3V VOLTAGE REGULATOR (For AUDIO SIGNAL)
IC701 NJM2871F33
3.3V (max 30mA)
3.3V (max 286mA)
SD603 MA713
IC201 NJU7223DL1
3.3V VOLTAGE REGULATOR
AND GATE IC
IC204 TC74VHC08FT (1/4)
IC204 TC74VHC08FT (2/4)
XL301 16.9MHz
IC301 MN103S26EDCUB
SUPER OPTICAL DISC CONTROLLER
CB101 54104-5092
From FRONT P.W.Board (5/7) (CB9501)
SD602 MA713
IC203 BD4828G
RESET IC
IC204 TC74VHC08FT (4/4)
AND GATE IC
TP207 /RESET
VHALF (1.65V)
TDSODC[0:10]
DRV[0:1]
HOST[1:3]
DOUT
AMUTE
/EJECT
/RST
/ATARST

NOTE: N. U. is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Terminal Voltage of IC/TR

<FRONT P.W.Board>

IC3301	
1	0
2	-10
3	-5

IC3302	
1	5
2	4
3	0
4	3.35
5	1.33

IC3303			
1	0	11	0
2	0	12	0
3	0	13	0
4	3.55	14	5
5	5	15	5
6	2.75	16	5
7	0	17	14.2
8	0	18	0
9	0	19	0
10	0	20	0

IC3304	
1	8.87
2	8.87
3	0
4	5.04
5	1.29

IC3305	
1	7.02
2	0
3	8.87

IC3306	
1	4.98
2	8.87
3	0
4	5.13
5	1.29

IC3307	
1	5
2	5
3	0
4	0
5	0

IC3308	
1	5
2	0
3	1.37
4	3.4
5	5

IC3309	
1	4.92
2	8.87
3	0
4	5.19
5	1.29

IC3310	
1	5
2	8.9
3	0
4	8.2
5	1.39

IC4301			
1	2.6	5	5
2	0	6	2.6
3	0	7	0
4	0	8	5

IC4302	
1	5
2	0
3	1.37
4	3.4
5	5

IC4303			
1	1.56	5	1.63
2	5	6	5
3	PS	7	PS
4	0	8	0

IC4304							
1	6.95	17	NC	33	1.77	49	PS
2	1.5	18	NC	34	1.35	50	1.7
3	PS	19	4	35	1.78	51	0
4	PS	20	0	36	PS	52	PS
5	-5	21	0	37	2.65	53	2.59
6	2.6	22	PS	38	2.8	54	PS
7	1.7	23	5	39	2.59	55	0
8	0.98	24	5	40	2.6	56	0
9	1	25	1.95	41	2.6	57	PS
10	3.57	26	PS	42	0	58	PS
11	0	27	2.54	43	0	59	2
12	3	28	3	44	2.9	60	0
13	2.6	29	0	45	5	61	PS
14	4.5	30	2.28	46	1.71	62	2.66
15	3.3	31	1.83	47	0	63	4.38
16	2.86	32	1.33	48	1.71	64	PS

TO SCHEMATIC TO CONTENTS

IC4305			
1	PS	9	PS
2	5	10	5
3	5	11	5
4	PS	12	PS
5	PS	13	PS
6	0	14	0
7	PS	15	PS
8	0	16	5

IC4306			
1	0	11	5
2	2.9	12	4.4
3	2.3	13	1.86
4	3.1	14	0
5	5	15	5
6	5	16	5
7	2.66	17	0
8	2.82	18	3
9	0	19	2.66
10	5	20	0

IC4307			
1	0	5	0
2	0	6	0
3	0	7	0
4	0	8	3.4

IC4310			
1	0	9	PS
2	PS	10	0
3	5.2	11	0
4	PS	12	PS
5	PS	13	PS
6	0	14	0
7	0	15	PS
8	0	16	5

IC4311			
1	3	9	PS
2	5	10	PS
3	1.66	11	3
4	0	12	5
5	1.66	13	5
6	PS	14	3
7	5	15	0
8	3	16	3

IC4312							
1	0	21	0	41	0	61	PS
2	PS	22	0	42	0	62	PS
3	3.44	23	0	43	0	63	PS
4	3.44	24	0	44	0	64	PS
5	PS	25	0	45	0	65	PS
6	PS	26	0	46	3.45	66	PS
7	PS	27	0	47	0	67	PS
8	3.45	28	0	48	0	68	PS
9	PS	29	0	49	0	69	0
10	0	30	0	50	0	70	3.45
11	PS	31	0	51	0	71	PS
12	0	32	3.45	52	0	72	PS
13	0	33	3.45	53	0	73	PS
14	4.99	34	0	54	0	74	PS
15	0	35	0	55	0	75	PS
16	0	36	PS	56	3.45	76	PS
17	3.45	37	1.64	57	3.45	77	0
18	PS	38	1.26	58	3.45	78	0
19	0	39	0	59	0	79	0
20	3.45	40	0	60	0	80	3.45

TO SCHEMATIC

TO CONTENTS

IC4313			
1	0	8	PS
2	0	9	PS
3	5	10	PS
4	5	11	PS
5	0	12	PS
6	5	13	PS
7	0	14	5

IC4314							
1	PS	13	0	25	PS	37	3
2	PS	14	0	26	PS	38	PS
3	PS	15	0	27	0	39	0
4	PS	16	0	28	PS	40	PS
5	PS	17	PS	29	PS	41	0
6	PS	18	PS	30	PS	42	PS
7	PS	19	PS	31	PS	43	0
8	PS	20	PS	32	PS	44	PS
9	0	21	PS	33	PS	45	0
10	0	22	PS	34	PS	46	0
11	3.3	23	PS	35	PS	47	3.3
12	3.3	24	PS	36	PS	48	PS

IC4900			
1	3.15	8	0
2	3.15	9	0
3	PS	10	0
4	PS	11	0
5	PS	12	1.48
6	PS	13	2.78
7	0	14	3.15

IC4901			
1	0	9	1.68
2	PS	10	PS
3	PS	11	PS
4	PS	12	PS
5	PS	13	PS
6	PS	14	PS
7	PS	15	0
8	0	16	3.1

IC4902			
1	PS	8	PS
2	PS	9	0
3	0	10	PS
4	PS	11	PS
5	PS	12	PS
6	0	13	PS
7	0	14	3.15

IC4903			
1	PS	5	PS
2	3.1	6	0
3	PS	7	PS
4	0	8	3.1

IC4904			
1	PS	5	PS
2	5	6	PS
3	PS	7	PS
4	0	8	3.1

IC4905	
1	PS
2	PS
3	0
4	PS
5	3

IC4906	
1	5
2	0
3	3.15
4	1.67
5	5

TO SCHEMATIC TO CONTENTS

IC4909			
1	PS	5	PS
2	PS	6	3.1
3	PS	7	3.1
4	0	8	3.1

IC5301					
1	PS	connect NAVI	8	5	
2	PS	connect NAVI	9	0	
3	PS	connect NAVI	10	5	
4	PS	connect NAVI	11	0	
5	0		12	PS	connect NAVI
6	5		13	PS	connect NAVI
7	0		14	5	

IC5302									
1	5		37	0		73	PS	109	0
2	5		38	3.31		74	PS	110	5
3	0		39	5.01		75	0	111	0
4	1.14		40	5.01		76	5	112	0
5	0		41	0		77	0	113	0
6	PS	0-5	42	PS	0-5	78	5	114	0
7	PS	0-5	43	PS	0-5	79	0	115	0
8	4.91		44	PS	0-5	80	0	116	0
9	5		45	5		81	0	117	5
10	0		46	PS	0-5	82	0	118	5
11	0		47	PS	0-5	83	5	119	5
12	0		48	PS	0-5	84	0	120	0
13	4.79		49	5		85	0	121	0
14	0		50	0		86	0	122	2.15
15	5		51	0		87	5	123	5
16	0		52	5		88	5	124	3.67
17	5		53	5		89	5	125	2.14
18	0		54	5		90	5	126	5
19	4.79		55	5		91	0	127	5
20	0		56	5		92	0	128	0
21	5		57	PS	0-5	93	PS	129	5
22	5		58	5		94	PS	130	PS
23	0		59	5		95	PS	131	5
24	0		60	5		96	5	132	0
25	0		61	5		97	5	133	0
26	0		62	0		98	5	134	5
27	0		63	PS	0-5	99	0	135	0
28	0		64	0		100	5	136	0
29	0		65	5		101	5	137	0
30	0		66	5		102	5	138	0
31	0		67	0		103	0	139	0
32	0		68	0		104	5	140	1.94
33	0		69	5		105	5	141	4.37
34	5		70	PS	CLK	106	0	142	2.56
35	5		71	PS	CLK	107	5	143	5
36	0		72	0		108	5	144	0

TO SCHEMATIC

TO CONTENTS

IC5303			
1	0	5	5
2	0	6	5
3	0	7	0
4	0	8	5

IC6702	
1	5
2	0
3	0
4	0
5	5

*Only IVA-D300R/IVA-D300RB

IC6703	
1	5
2	5
3	0
4	5
5	5

IC6704			
1	PS	5	2.58
2	PS	6	2.58
3	0	7	5
4	0	8	5

IC6705			
1	PS	5	2.58
2	PS	6	2.58
3	0	7	5
4	0	8	5

IC6706			
1	PS	8	5
2	5	9	0
3	PS	10	PS
4	PS	11	PS
5	0	12	PS
6	5	13	5
7	0	14	5

IC6707			
1	2	5	PS
2	5	6	0
3	PS	7	5
4	PS	8	PS

IC6708			
1	0	14	0
2	0	15	0
3	0	16	8.82
4	0	17	8.82
5	0	18	4.47
6	0	19	0
7	0	20	4.47
8	0	21	8.82
9	0	22	0
10	0	23	0
11	0	24	0
12	0	25	0
13	0		

IC6709			
1	0	14	0
2	0	15	0
3	0	16	8.82
4	0	17	8.82
5	0	18	4.47
6	0	19	0
7	0	20	4.47
8	0	21	6.39
9	0	22	0
10	0	23	0
11	0	24	0
12	0	25	0
13	0		

IC6710			
1	0	8	PS
2	0	9	PS
3	0	10	PS
4	5	11	PS
5	5	12	PS
6	5	13	PS
7	0	14	5

IC6711		
1	4.75	
2	5	GRN
3	0	
4	5	
5	5	

*Only IVA-D300R/IVA-D300RB

IC6712		
1	4.75	
2	5	RED
3	0	
4	5	
5	5	

*Only IVA-D300R/IVA-D300RB

IC9102			
1	4.2	5	4.2
2	PS	6	PS
3	PS	7	4.2
4	0	8	3.3

TO SCHEMATIC
TO CONTENTS

IC9101			
1	4.2	5	PS
2	PS	6	PS
3	PS	7	4.2
4	0	8	3.3

IC9103	
1	5
2	PS
3	0
4	PS
5	5

IC9104	
1	3.3
2	3.3
3	0
4	5
5	5

IC9201			
1	PS	9	0
2	PS	10	2.5
3	PS	11	3.3
4	0	12	NC
5	3.3	13	5.0
6	5.0	14	PS
7	PS	15	PS
8	PS	16	PS

IC9202			
1	PS	5	PS
2	PS	6	PS
3	PS	7	PS
4	0.04	8	7.0

IC9501-1									
1	3.3	38	0	75	3.3	112	0	149	PS
2	PS	39	PS	76	0	113	PS	150	PS
3	PS	40	PS	77	PS	114	PS	151	0
4	PS	41	PS	78	PS	115	NC	152	PS
5	PS	42	0	79	PS	116	NC	153	3.3
6	PS	43	0	80	PS	117	NC	154	PS
7	PS	44	2.0	81	PS	118	NC	155	PS
8	0	45	0	82	PS	119	NC	156	0
9	2.0	46	0	83	2	120	0	157	3.3
10	PS	47	0	84	0	121	2.0	158	PS
11	PS	48	0	85	PS	122	PS	159	3.3
12	PS	49	PS	86	PS	123	PS	160	3.42
13	PS	50	PS	87	PS	124	PS	161	0
14	PS	51	3.3	88	PS	125	PS	162	PS
15	PS	52	0	89	PS	126	PS	163	0
16	PS	53	PS	90	PS	127	PS	164	3.3
17	0	54	PS	91	0	128	PS	165	3.3/0
18	3.3	55	PS	92	3.3	129	0	166	PS
19	PS	56	PS	93	PS	130	3.3	167	PS
20	PS	57	PS	94	PS	131	PS	168	PS
21	PS	58	PS	95	PS	132	PS	169	PS
22	PS	59	3.3	96	PS	133	PS	170	PS
23	0	60	0	97	NC	134	PS	171	0
24	3.3	61	PS	98	0	135	PS	172	2
25	3.3	62	PS	99	3.3	136	PS	173	NC
26	0	63	PS	100	PS	137	PS	174	PS
27	3.3	64	PS	101	PS	138	0	175	PS
28	0	65	PS	102	PS	139	2.0	176	PS
29	0	66	PS	103	0	140	PS	177	0
30	0	67	0	104	3.3	141	PS	178	PS
31	3.3	68	3.3	105	0	142	NC	179	PS
32	PS	69	PS	106	0	143	NC	180	PS
33	PS	70	3.3	107	1.2	144	PS	181	PS
34	0	71	PS	108	PS	145	3.3	182	PS
35	2.0	72	PS	109	2.2	146	PS	183	3.3
36	0	73	PS	110	1.2	147	0	184	0
37	0	74	PS	111	3.3	148	3.3	185	PS

NOTE : Pin No. 165 : No MUTE/MUTE

TO SCHEMATIC TO CONTENTS

IC9501-2			
186	PS	198	NC
187	PS	199	NC
188	NC	200	0
189	NC	201	3.3
190	NC	202	0
191	NC	203	0
192	0	204	PS
193	3.3	205	PS
194	NC	206	PS
195	NC	207	PS
196	NC	208	0
197	NC		

IC9502			
1	PS	11	PS
2	PS	12	PS
3	PS	13	PS
4	PS	14	PS
5	PS	15	PS
6	PS	16	PS
7	PS	17	PS
8	PS	18	PS
9	PS	19	PS
10	0	20	3.3

IC9503			
1	PS	11	PS
2	PS	12	PS
3	PS	13	PS
4	PS	14	PS
5	PS	15	PS
6	PS	16	PS
7	PS	17	PS
8	PS	18	PS
9	PS	19	PS
10	0	20	3.3

IC9504			
1	4.2	5	PS
2	5.0	6	3.3
3	PS	7	4.2
4	0	8	3.3

IC9505			
1	PS	11	PS
2	PS	12	PS
3	PS	13	PS
4	PS	14	PS
5	PS	15	PS
6	PS	16	PS
7	PS	17	PS
8	PS	18	PS
9	PS	19	PS
10	0	20	3.3

IC9506	
1	4.2
2	3.3
3	0
4	5
5	5

IC9701							
1	3.3	15	PS	29	PS	43	3.3
2	PS	16	PS	30	PS	44	PS
3	3.3	17	PS	31	PS	45	PS
4	PS	18	PS	32	PS	46	0
5	PS	19	PS	33	PS	47	PS
6	0	20	PS	34	PS	48	PS
7	PS	21	PS	35	PS	49	3.3
8	PS	22	PS	36	NC	50	PS
9	3.3	23	PS	37	3.3	51	PS
10	PS	24	PS	38	1.5	52	0
11	PS	25	PS	39	0	53	PS
12	0	26	PS	40	0	54	0
13	PS	27	3.3	41	0		
14	3.3	28	0	42	PS		

IC9702							
1	PS	13	NC	25	PS	37	3.3
2	PS	14	0.3	26	PS	38	PS
3	PS	15	NC	27	0	39	NC
4	PS	16	PS	28	PS	40	PS
5	PS	17	PS	29	PS	41	NC
6	PS	18	PS	30	NC	42	PS
7	PS	19	PS	31	PS	43	NC
8	PS	20	PS	32	NC	44	PS
9	PS	21	PS	33	PS	45	PS
10	NC	22	PS	34	NC	46	0
11	PS	23	PS	35	PS	47	PS
12	3.3/0	24	PS	36	NC	48	PS

NOTE : Pin No. 165 : No RESET/RESET

IC9703			
1	PS	15	PS
2	PS	16	0
3	PS	17	0
4	PS	18	PS
5	PS	19	PS
6	PS	20	PS
7	3.3	21	0
8	PS	22	PS
9	PS	23	PS
10	PS	24	PS
11	PS	25	PS
12	PS	26	PS
13	PS	27	3.3
14	PS	28	PS

IC9704		
1	PS	
2	0/3.3	No RESET /RESET
3	0	
4	PS	
5	3.3	

IC9705			
1	0	11	PS
2	NC	12	PS
3	PS	13	PS
4	PS	14	PS
5	NC	15	PS
6	NC	16	PS
7	PS	17	PS
8	PS	18	PS
9	NC	19	PS
10	0	20	5

Ref. No.	E	B	C	NOTE
Q3301	0	9.0/0	0/5	DIM ON/OFF
Q3305	0	5	0	
Q3306	-10	-9.4	-10	
Q3312	-5	-4.5	-5	
Q3313	5	4.4	5	
Q3314	0	5	0	
Q4301	PS	PS	-5	
Q4302	PS	PS	7	
Q4303	PS	PS	0	
Q4307	0	5	0	
Q5301	0	PS	PS	connect NAVI
Q5302	0	PS	PS	BUZZER
Q6703	PS	PS	PS	
Q6704	PS	PS	PS	
Q6705	PS	PS	PS	
Q6706	PS	PS	PS	

Ref. No.	E	B	C	NOTE
Q6707	PS	PS	PS	
Q6708	PS	PS	PS	
Q6709	PS	PS	PS	
Q6710	PS	PS	PS	
Q6711	PS	PS	PS	
Q6712	PS	PS	PS	
Q6713	PS	PS	8	
Q6714	PS	PS	8	
Q6715	PS	PS	8	
Q6716	PS	PS	8	
Q6717	PS	PS	8	
Q6718	0	5.0/0	0/8.8	TILT OPEN/CLOSE
Q6719	8.8/0	8.2/8.8	8.8	TILT OPEN/CLOSE
Q9501	0	4.2	0	
Q9701	0	5	0	
Q9801	PS	PS	0	
Q9802	PS	PS	0	

Ref. No.	1	2	3	4	5
Q3302	NC	5	5	5	0
Q3303	0	5	5	5	NC
Q3307	NC	5	5	5	0
Q3308	NC	15.6	15.6	5	0
Q3309	NC	7	7	5	0
Q3310	NC	5	5	5	0
Q4315	NC	3.4	3.4	5	0
Q6722	NC	9	9	5	0

[Measuring Conditions]

1.Power Supply Voltage	: DC14.4V
2.Measuring Meter	: Digital Multi Meter
3.Measuring Point Reference	: Between GND
4.Measuring Condition	: at playing DVD (TDV540), Screen Mode-1, Monitor OPEN, Screen display prohibition release

TO SCHEMATIC
TO CONTENTS

<LCD P.W.Board>

IC8003					
1	0.33	PS	25	1.47	PS
2	3.36		26	0.1	PS
3	0		27	1.47	PS
4	0		28	0	
5	3.36		29	1.45	PS
6	3.12	PS	30	3.37	
7	3.32	PS	31	0	
8	0		32	3.09	
9	0		33	1.71	PS
10	3.08		34	0	
11	3.08		35	3.37	
12	0		36	1.71	PS
13	0		37	1.74	PS
14	1.72	PS	38	0	
15	3.36		39	3.36	
16	0.62	PS	40	3.37	
17	0	PS	41	0	
18	0.18	PS	42	0	
19	0.18	PS	43	3.08	
20	0.1	PS	44	0	
21	0.5	PS	45	0	
22	0		46	0	
23	0.11	PS	47	3.37	
24	0.1	PS	48	0	

IC8101	
1	5.14
2	0
3	1.35
4	3.38
5	5.14

IC8102	
1	1.69
2	0
3	1.7
4	1.26
5	5.14

IC8103				
1	3.12	PS	8	5.14
2	3.12	PS	9	0
3	0.46	PS	10	0
4	0.46	PS	11	5.14
5	0.46	PS	12	0
6	4.76	PS	13	0
7	0		14	5.14

IC8104		
1	0	
2	0.5	PS
3	0	
4	2.95	PS
5	3.37	

IC8105	
1	11.98
2	0
3	15.74

IC8106		
1	0	
2	0.63	PS
3	0	
4	3.05	PS
5	3.37	

IC8107		
1	3.34	PS
2	3.16	PS
3	0	
4	0.33	PS
5	3.37	

IC8108					
1	0.38	PS	8	0.27	PS
2	1.64	PS	9	1.52	PS
3	3.37		10	3.35	
4	3.34	PS	11	3.35	
5	3.16	PS	12	1.41	
6	0		13	0	
7	0		14	1.84	

TO SCHEMATIC TO CONTENTS

IC8109					
1	3.09	PS	5	3.37	
2	3.37		6	0	
3	3.37		7	1.31	PS
4	0		8	3.37	

IC8202					
1	5		17	0	
2	5.02		18	0	
3	5		19	0	
4	0		20	0	
5	O.2	PS	21	0	
6	5		22	4.86	PS
7	0		23	4.86	PS
8	4.86	PS	24	0.15	PS
9	5.02		25	0.13	PS
10	0		26	5.01	
11	4.82	PS	27	5.01	
12	4.88	PS	28	0	
13	0		29	0	
14	5.02		30	5.02/0	by output wave-form
15	5.02		31	5.02/0	by output wave-form
16	4.8	PS	32	5.02/0	by output wave-form

NOTE : at Pulse Touch active

IC8203	
1	0
2	0
3	5.05
4	4.44

IC8204			
1	0.1	5	0
2	1.41	6	0
3	0.32	7	0
4	0	8	5.13

IC8207				
1	0	11	2.6	PS
2	1.06	12	2.65	PS
3	5.03	13	2.71	
4	3.48	14	0	
5	5.03	15	2.16	PS
6	0	16	0.22	
7	2.71	17	1.63	
8	1.62	18	2.15	PS
9	1.41	19	2.65	PS
10	2	20	2.59	PS

IC8209	
1	0
2	5.05
3	0
4	0
5	3.37

	G	D	S	NOTE
Q8201	PS	PS	0	
Q8215	PS	PS	0	at Pulse Touch active

Ref. No.	E	B	C	NOTE
Q8202	0	0.69	0.1	
Q8203	PS	PS	PS	at Pulse Touch active
Q8204	0	0	5.03	
Q8205	PS	PS	PS	at Pulse Touch active
Q8206	PS	PS	PS	at Pulse Touch active
Q8207	PS	PS	PS	at Pulse Touch active
Q8208	PS	PS	PS	at Pulse Touch active

TO SCHEMATIC TO CONTENTS

Ref. No.	E	B	C	NOTE
Q8209	PS	PS	PS	at Pulse Touch active
Q8210	5.03	PS	PS	at Touch Panel active
Q8211	5.03	PS	PS	at Touch Panel active
Q8212	5.03	PS	PS	at Touch Panel active
Q8213	0	PS	PS	at Touch Panel active
Q8214	0	PS	PS	at Touch Panel active
Q8216	5.01	4.98(PS)	PS	at Pulse Touch active
Q8217	0	0.3(PS)	4.8(PS)	at Pulse Touch active

Q8218					
1	0.22		5	4.42	PS
2	2.59	PS	6	4.42	PS
3	8.63		7	4.42	PS
4	7	PS	8	4.42	PS

Q8219					
1	0.22		5	4.44	PS
2	2.6	PS	6	4.44	PS
3	8.63		7	4.44	PS
4	7	PS	8	4.44	PS

Q8220	
1	0
2	0
3	0
4	5.01
5	4.99
6	0

[Measuring Conditions]
1.Power Supply Voltage : DC14.4V
2.Measuring Meter : Digital Multi Meter
3.Measuring Point Reference : Between GND
4.Measuring Condition : at playing DVD,
Screen Mode-1

TO SCHEMATIC TO CONTENTS

<ESC P.W.Board>

IC8601		
1	4.93/4.93	usually/at receiving Remote Control
2	0	
3	0	
4	4.93/PS	usually/at receiving Remote Control

Ref. No.	E	B	C	NOTE
Q8602	0/0	O/PS	7.47/PS	usually/at operation KEY
Q8603	0/0	0/4.94	7.44/0.1	usually/at V.SEL
Q8604	0/0	0/4.94	7.46/0.1	usually/at DISC IN
Q8605	0.08/0.08	0.83/0	0.13/2.66	DIMMER OFF/ON (at lighting RED LED) (Only IVA-D300R/IVA-D300RB)
Q8606	0/0	0.78/0	0.08/6.46	POWER ON/OFF (at lighting RED LED) (Only IVA-D300R/IVA-D300RB)
Q8607	0/0	0.81/0	0.13/7.53	POWER ON/OFF (Only IVA-D300E)
	0/0	0.81/0	0.11/7.51	POWER ON/OFF (at lighting GRN LED) (Only IVA-D300R/IVA-D300RB)
Q8608	0.13/0.1	0.89/0	0.18/4.49	DIMMER OFF/ON (Only IVA-D300E)
	0.11/0.1	0.85/0	0.15/4.69	DIMMER OFF/ON (at lighting GRN LED) (Only IVA-D300R/IVA-D300RB)

[Measuring Conditions]

1.Power Supply Voltage	: DC14.4V
2.Measuring Meter	: Digital Multi Meter
3.Measuring Point Reference	: Between GND
4.Measuring Condition	: at playing DVD

<POWER P.W.Board>

IC3701	
1	4.99
2	8.93
3	0
4	5.04
5	1.28

IC3702	
1	4.91
2	6.36
3	0
4	5.06
5	1.28

IC3703	
1	5.01
2	3.36
3	0
4	2.07
5	1.31

[Measuring Conditions]

1.Power Supply Voltage	: DC14.4V
2.Measuring Meter	: Digital Multi Meter
3.Measuring Point Reference	: Between GND
4.Measuring Condition	: at playing DVD

<OPT P.W.Board>

IC8801		
1	0	
2	2.25	
3	5.01	
4	2.56	PS

[Measuring Conditions]

1.Power Supply Voltage	: DC14.4V
2.Measuring Meter	: Digital Multi Meter
3.Measuring Point Reference	: Between GND
4.Measuring Condition	: at playing DVD

TO SCHEMATIC TO CONTENTS

(DVD Deck Mechanism)

NOTE : DATA, ADDRESS, DIGITAL, PWM : Low/High switching Digital Signal by 0V/3.3V
ANALOG : usually changing Signal
RF : High-frequency RF Signal

IC201	
1	3.3
2	4.83
3	0

IC202	
1	1.81
2	4.83
3	0

IC203	
1	3.15
2	3.3
3	0

IC204	
1	DIGITAL
2	DIGITAL
3	DIGITAL
4	DIGITAL
5	DIGITAL
6	DIGITAL
7	0
8	DIGITAL
9	DIGITAL
10	DIGITAL
11	DIGITAL
12	DIGITAL
13	DIGITAL
14	3.3

IC301							
1	3.3	45	CLOCK	89	0	133	3.29
2	3.28	46	0	90	1.63	134	3.27
3	3.3	47	3.15	91	1.64	135	3.27
4	0	48	0	92	ANALOG	136	ADDRESS
5	3.3	49	CLOCK	93	ANALOG	137	ADDRESS
6	3.3	50	DATA	94	ANALOG	138	3.29
7	3.3	51	0	95	ANALOG	139	ADDRESS
8	0	52	0	96	ANALOG	140	DATA
9	ADDRESS	53	PWM	97	1.16	141	0
10	ADDRESS	54	PWM	98	1.63	142	3.27
11	ADDRESS	55	PWM	99	3.29	143	3.3
12	ADDRESS	56	PWM	100	1.25	144	0
13	ADDRESS	57	3.3	101	1.25	145	3.27
14	ADDRESS	58	1.8	102	0	146	3.27
15	ADDRESS	59	0	103	1.44	147	3.27
16	ADDRESS	60	0	104	2.14	148	0
17	ADDRESS	61	PWM	105	2.82	149	DATA
18	1.8	62	PWM	106	1.65	150	DATA
19	0	63	PWM	107	1.62	151	DATA
20	1.8	64	PWM	108	1.5	152	1.81
21	0	65	DIGITAL	109	3.3	153	0
22	ADDRESS	66	DIGITAL	110	RF	154	0
23	ADDRESS	67	DIGITAL	111	RF	155	0
24	ADDRESS	68	DIGITAL	112	2.16	156	3.3
25	ADDRESS	69	FG	113	0	157	DATA
26	ADDRESS	70	DIGITAL	114	ANALOG	158	DATA
27	ADDRESS	71	DIGITAL	115	ANALOG	159	DATA
28	ADDRESS	72	DIGITAL	116	3.3	160	DATA
29	ADDRESS	73	0	117	ANALOG	161	DATA
30	ADDRESS	74	3.3	118	ANALOG	162	3.3
31	3.3	75	0	119	ANALOG	163	0
32	0	76	1.8	120	ANALOG	164	DATA
33	3.3	77	0	121	ANALOG	165	DATA
34	3.29	78	3.3	122	ANALOG	166	DATA
35	3.3	79	CLOCK	123	ANALOG	167	DATA
36	3.29	80	CLOCK	124	ANALOG	168	DATA
37	DATA	81	0	125	3.3	169	3.3
38	DATA	82	0	126	0	170	0
39	DATA	83	0	127	0	171	DATA
40	DATA	84	DIGITAL	128	0	172	DATA
41	DATA	85	0	129	0	173	DATA
42	DATA	86	1.72	130	0	174	4.85
43	DATA	87	1.68	131	3.28	175	3.3
44	DATA	88	3.37	132	3.29	176	3.25

TO SCHEMATIC TO CONTENTS

IC401							
1	-	33	-	65	0	97	3.29
2	-	34	3.28	66	3.3	98	3.29
3	DATA	35	3.29	67	-	99	0
4	DATA	36	-	68	3.29	100	-
5	DATA	37	-	69	0	101	-
6	DATA	38	3.3	70	0	102	-
7	3.29	39	0	71	0	103	ADDRESS
8	0	40	0	72	1.65	104	ADDRESS
9	DATA	41	3.3	73	1.71	105	ADDRESS
10	DATA	42	3.3	74	2.8	106	ADDRESS
11	DATA	43	3.3	75	2.99	107	ADDRESS
12	DATA	44	3.3.6	76	-	108	ADDRESS
13	SW	45	3.3	77	-	109	ADDRESS
14	SW	46	3.3	78	-	110	ADDRESS
15	SW	47	-	79	3.28	111	ADDRESS
16	3.29	48	-	80	3.23	112	-
17	3.27	49	-	81	3.22	113	-
18	SW	50	3.3	82	0	114	ADDRESS
19	SW	51	0	83	3.28	115	ADDRESS
20	SW	52	0	84	3.28	116	ADDRESS
21	0	53	0	85	3.29	117	ADDRESS
22	0	54	0	86	3.29	118	ADDRESS
23	3.28	55	FG	87	3.29	119	3.29
24	3.23	56	3.3	88	1.64	120	-
25	3.22	57	3.3	89	1.64	121	ADDRESS
26	0	58	3.3	90	1.64	122	ADDRESS
27	0	59	3.3	91	-	123	ADDRESS
28	0	60	3.3	92	-	124	ADDRESS
29	3.29	61	3.3	93	-	125	-
30	CLOCK	62	0	94	1.64	126	-
31	CLOCK	63	3.3	95	-	127	-
32	0	64	3.28	96	3.29	128	-

IC402	
1	0
2	0
3	0
4	0
5	3.23
6	3.22
7	0
8	3.29

IC403	
1	1.37
2	1.63
3	1.63
4	0
5	1.64
6	1.64
7	1.64
8	3.29

IC501							
1	ANALOG	17	ANALOG	33	0	49	RF
2	3.45	18	ANALOG	34	2.07	50	RF
3	ANALOG	19	DIGITAL	35	ANALOG	51	RF
4	3.19	20	2.1	36	3.29	52	RF
5	DIGITAL	21	ANALOG	37	ANALOG	53	RF
6	ANALOG	22	ANALOG	38	ANALOG	54	RF
7	ANALOG	23	DIGITAL	39	ANALOG	55	4.85
8	DIGITAL	24	-	40	ANALOG	56	2.19
9	DIGITAL	25	DIGITAL	41	ANALOG	57	RF
10	DIGITAL	26	0	42	ANALOG	58	RF
11	DIGITAL	27	2.14	43	ANALOG	59	RF
12	DIGITAL	28	4.85	44	ANALOG	60	RF
13	DIGITAL	29	1.64	45	ANALOG	61	0
14	DIGITAL	30	RF	46	ANALOG	62	RF
15	1.17	31	RF	47	ANALOG	63	RF
16	1.64	32	2.16	48	ANALOG	64	DIGITAL

TO SCHEMATIC

TO CONTENTS

IC601			
1	3.06	28	1.68
2	3.06	29	1.65
3	3.08	30	6.87
4	3.08	31	6.87
5	3.08	32	6.87
6	3.08	33	ANALOG
7	1.26	34	ANALOG
8	0	35	ANALOG
9	3.05	36	ANALOG
10	6.86	37	ANALOG
11	3.05	38	0
12	0	39	0
13	0	40	0
14	0	41	0
15	0	42	0
16	0	43	0
17	0	44	6.87
18	3.05	45	ANALOG
19	6.85	46	ANALOG
20	6.85	47	ANALOG
21	FG	48	ANALOG
22	3.28	49	ANALOG
23	3.28	50	ANALOG
24	1.69	51	6.87
25	0	52	ANALOG
26	1.64	53	ANALOG
27	1.64	54	4.86

IC701	
1	6.97
2	0
3	1.33
4	3.37
5	6.97

Q506	
1	NC
2	4.69
3	4.81
4	3.27
5	0

Q507	
B	3.56
C	2.33
E	4.2

Q508	
B	3.3
C	1.98
E	3.95

[Measuring Conditions]

1. Power Supply Voltage	: MECH-7V, MECH-5V power supply
2. Measuring Meter	: Digital Multi Meter
3. Measuring Point Reference	: Between GND
4. Measuring Condion	: playing DVD, measuring of DVD-MECH simple substance

TO SCHEMATIC

TO CONTENTS

Description of IC Terminal

D70F3089YGJ : IC5302

No.	Symbol	I/O	Terminal Description
1	DVD-SW1	I	Disc insertion detection-1 terminal.
2	DVD-SW2	I	Disc insertion detection-2 terminal.
3	NC(PULL-DOWN)	-	Pull-down connect terminal.
4	DVD-TEMP	I	DVD Mechanism temperature detection terminal.
5	PORTGND0	-	GND terminal for Port. (connect to GND)
6	DVD-STB	O	Output terminal to Video u-COM. (at transmitting command : STB output, at receiving status : ACT output)
7	DVD-CS	O	Chip select signal output terminal to Video u-COM.
8	DVD-RST	O	System RESET signal output terminal to Video u-COM.
9	DVD-EJECT	O	DVD Mechanism compulsion EJECT control terminal. (open drain)
10	D-MUTE	O	Digital audio output MUTE signal output terminal to B.E.
11	V-MUTE IN	I	Analog video MUTE signal input terminal from B.E.
12	NC	-	No connect terminal.
13	DIMMER OUT	O	LED DIMMER signal output terminal. (lighting Key) (L:DIMMER ON)
14	NC	-	No connect terminal.
15			
16	SIMAL-LED	O	SIMAL LED control signal output terminal.
17	DISC-IN-LED	O	DISC-IN LED control signal output terminal.
18	POWER IND	O	POWER indicator LED control signal output terminal.
19	GRN(BLU) LED	O	2LIT switching signal output terminal. (at GRN/BLU) (H:GRN(BLU)lighting)
20	NC	-	No connect terminal.
21	P-CONT10	O	Power supply control terminal.
22	PORTVDD0	-	Power supply terminal for Port. (P40-P47,P50-P57,P60-P65,P90-P96,CLKOUT) (connect to VDD+5V)
23	NC	-	No connect terminal.
I			
33			
34	EEP-SDA	I/O	DATA Communication input/output terminal to E2P-ROM.
35	EEP-SCL	O	CLOCK output terminal to E2P-ROM.
36	NC	-	No connect terminal.
37	GND0	-	GND connect terminal.
38	CPUREG	-	Capacitor connect terminal.
39	VDD0	-	Power supply terminal. (connect to VDD+5V)
40	$\overline{\text{RESET}}$	I	System RESET signal input terminal.
41	Vpp	-	Programing power supply terminal.
42	DVD-DI	I	DATA input terminal from Video u-COM.
43	DVD-D0	O	DATA output terminal to Video u-COM.
44	DVD-ACK	I	Input terminal from Video u-COM. (at transmitting command : ACT input, at receiving status : STB input)
45	BAT-DET	I	Compulsion stand-by detection input terminal.
46	IS-RXD	I	RX signal terminal for IS-BUS communication.
47	IS-TXD	O	TX signal terminal for IS-BUS communication.
48	IS-F OUT	O	FRAME-OUT signal terminal for IS-BUS communication.
49	P-CONT1	O	Power supply terminal.
50	BUZZER	O	BUZZER signal output terminal.
51	P-CONT2	O	Power supply terminal.
52	P-CONT3		

TO SCHEMATIC
TO CONTENTS

No.	Symbol	I/O	Terminal Description
53	P-CONT4	O	Power supply terminal.
54	P-CONT5		
55	P-CONT6		
56	P-CONT7		
57	IS-F IN	I	FRAME-IN signal terminal for IS-BUS communication.
58	P-CONT8	O	Power supply terminal.
59	P-CONT9		
60	PORTVDD1	-	Power supply terminal for Port. (P00-P03, P10-P17, P30-P37, P100-P107, P110-P117) (connect to VDD+5V)
61	MTR-3	O	MOTOR Control-3 terminal.
62	NC	-	No connect terminal.
63	REMOCON IN	I	Remote Control signal input terminal.
64	NC	-	No connect terminal.
65	MTR-4	O	MOTOR Control-4 terminal.
66	R.REM IN	I	Rear Remote Control input terminal.
67	NC	-	No connect terminal.
68	ACT LED	O	ACTION LED control signal output terminal.
69	SUB-STBY	I	Stand-by signal input terminal.
70	XT2	-	Crystal connect terminal for sub clock OSC.
71	XT1		
72	GND2	-	GND connect terminal.
73	X1	-	Crystal connect terminal for main clock OSC.
74	X2		
75	NC	-	No connect terminal.
76	BL-PWM	O	PWM signal output terminal for backlight lighting adjustment.
77	NC	-	No connect terminal.
78	DIMMER-IN	I	Illumination signal input terminal from vehicle.
79	NC	-	No connect terminal.
80	ZX3	O	Screen Mode control signal output terminal to timing control IC.
81	ZX2		
82	ZX1		
83	V-MUTE OUT	O	Analog video MUTE signal output terminal.
84	NC	-	No connect terminal.
I			
86			
87	OSD-RESET	O	RESET signal output terminal to OSD/Flash Memory.
88	N/P-SEL	O	NTSC/PAL switching signal output terminal. (H:NTSC, L:PAL)
89	REM-SEL	O	Remote Control signal output control terminal.
90	Y/COMP-SEL	O	Brightness signal/composite signal switching signal output terminal. (H:Y, L:Composite)
91	SYNC-SEL	O	Synchronizing signal switching signal output terminal. (H:NAVI side)
92	PORTGND1	-	GND terminal for Port. (connect to GND)
93	OSD-SCLK	O	CLOCK signal output terminal to OSD.
94	OSD-CS	O	Chip enable signal output terminal to OSD.
95	OSD-SOUT	O	Serial DATA output terminal to OSD.
96	FFB-RESET	O	IC RESET signal output terminal for force feedback.
97	RGB-CLK	O	CLOCK signal output terminal to D/A Converter.
98	DAC-LD	O	Load DATA output terminal to D/A Converter.
99	RGB-DO	O	Serial DATA output terminal to D/A Converter.

TO SCHEMATIC TO CONTENTS

No.	Symbol	I/O	Terminal Description
100	VGL-CONT	O	LCD power supply -10V output control signal output terminal.
101	VGH-CONT	O	LCD power supply +15V output control signal output terminal.
102	PORTVDD2	-	Power supply terminal for Port. (P04-P07, P20-P27, P120-P127, P130-P133, P140-P147, P150-P157) (connect to VDD+5V)
103	TILT-PHOTO	I	TILT-PHOTO pulse signal (Monitor angle) input terminal.
104	15-SW	I	Active NOSE position/condition detection SW signal input terminal.
105	END-SW		
106	FULL-SW		
107	FFB-CONT1	O	Force feedback control signal-1 output terminal.
108	FFB-CONT2	O	Force feedback control signal-2 output terminal.
109	FFB-CONT3	O	Force feedback control signal-3 output terminal.
110	TILT-SW	I	Active NOSE position/condition detection SW signal input terminal.
111	TER-SI	I	Serial input terminal for connecting terminal.
112	TER-SO	O	Serial output terminal for connecting terminal.
113	TER-SCL	O	Serial CLOCK terminal for connecting terminal.
114	BL-OFF	O	Backlight power supply control signal output terminal. (H:ON, L:OFF)
115	ENC-B	I	Rotary Encoder signal input terminal.
116	ENC-A		
117	NAVI-RXD	I	RX signal terminal for UART communication to NAVI. (NAVI Side : EXTX (as usual DISP CONT))
118	NAVI-TXD	O	TX signal terminal for UART communication to NAVI. (NAVI Side : EXRX (as usual WIDE/NORM))
119	NAVI-CONT	I	NAVI communication error recovery deal terminal. (inputted the same signal as NAVI-RXD)
120	TP-SEL4	O	Touch Panel signal terminal.
121	TP-SEL3		
122	TP-SEL2		
123	TP-SEL1		
124	FFB-TRG	O	Force feedback power supply control trigger signal output terminal.
125	ZERO-DET	I	Audio MUTE signal input terminal from DVD Mechanism.
126	BL-CANCEL	I	Compulsion backlight lighting control terminal. (H:lighting, L:ususally) (for design verification)
127	NC	-	No connect terminal.
128	VDD1	-	Power supply terminal. (P170-P176)
129	MTR-LVL1	O	MOTOR drive voltage control signal output terminal.
130	MTR-1	O	MOTOR control-1 terminal.
131	GND1	-	GND connect terminal.
132	MTR-2	O	MOTOR control-2 terminal.
133	NC	-	No connect terminal.
134			
135	TP-X	I	Touch Panel signal terminal.
136	TP-Y		
137	KEY-1	I	A/D format Key input terminal.
138	AREA1	I	AREA discrimination signal input terminal.
139	AREA2		
140	BL-TEMP	I	Backlight temperature detection terminal.
141	DIM-PHOTO	I	PHOTO Sensor terminal for auto DIMMER.
142	E.BOX-DET	I	External power supply BOX detection terminal. (as NOSE-DET of IVA-D900)
143	ADCVDD	-	Power supply terminal for A/D Converter.
144	ADCGND	-	GND terminal for A/D Converter.

TO SCHEMATIC TO CONTENTS

MN102H73G : IC401 (DV33M01B

No.	Symbol	I/O	Terminal Description
1	NC	-	No connect terminal.
2			
3	CPUDT0	I/O	Data input/output-0 terminal.
4	CPUDT1	I/O	Data input/output-1 terminal.
5	CPUDT2	I/O	Data input/output-2 terminal.
6	CPUDT3	I/O	Data input/output-3 terminal.
7	VDD	-	Power supply terminal.
8	VSS	-	GND potential supply terminal.
9	CPUDT4	I/O	Data input/output-4 terminal.
10	CPUDT5	I/O	Data input/output-5 terminal.
11	CPUDT6	I/O	Data input/output-6 terminal.
12	CPUDT7	I/O	Data input/output-7 terminal.
13	/MECH_SW1	I	Mechanism SW-1 input signal LEFT detection terminal.
14	/MECH_SW2	I	Mechanism SW-2 input signal RIGHT detection terminal.
15	/MECH_SW3	I	Mechanism SW-3 input signal 12cm-RELOAD detection terminal.
16	/SODC_RES	O	MN103S26E N-RESET signal terminal
17	AMUTE	O	Audio MUTE signal terminal.
18	/MECH_SW4	I	Mechanism SW-4 input signal 8cm-RELOAD detection terminal.
19	/MECH_SW5	I	Mechanism SW-5 input signal LOAD END detection terminal.
20	/LIMIT_SW	I	LIMIT SW input signal SLED maximum inner LIMIT detection terminal.
21	GND	-	GND connect terminal.
22			
23	/WORD	I	Data BUS width set up input terminal. (using 8bit Processor Mode)
24	VDD	-	Power supply terminal.
25	MODE	I	Mode set up input terminal. (using 8bit Processor Mode)
26	NC	-	No connect terminal.
27	XI(GND)	-	Low-speed OSC input terminal. (not used, connected VSS, not dealed SOFT)
28	XO(NC)	-	Low-speed OSC output terminal. (not used, OPEN, not dealed SOFT)
29	VDD	-	Power supply terminal.
30	OSCI	I	High-speed OSC input terminal.
31	OSC0	O	High-speed OSC output terminal.
32	VSS	-	GND potential supply terminal.
33	NC	-	No connect terminal.
34	/NMI(PULL-UP)	-	Pull-up connect terminal.
35	/RST	I	HARD RESET input terminal from power supply/HOST.
36	NC	-	No connect terminal.
37			
38	/INT0	I	MN103S26E /INT0 signal terminal.
39	/INT1	I	MN103S26E /INT1 signal terminal.
40	/CPUIRQ	I	MN103S26E /CPUIRQ signal terminal.
41	/EJECT	I	Eject key terminal. (using interrupt at Stand-by)
42	/LOAD_SW	I	OR Signal input terminal of Mechanism SW-1/SW-2. (using interrupt at STAND-BY)
43	/MRST	I	NM103S26E N-MRST input terminal.
44	/SLEEP	I	SLEEP Mode signal input terminal from HOST.
45	WAIT	I	MN103S26E N-RESET/WAIT signal input terminal.
46	/WAKEUP	O	MN103S26E STAND-BY cancellation signal terminal by NTRYCL signal.

TO SCHEMATIC

TO CONTENTS

No.	Symbol	I/O	Terminal Description
47	NC	-	No connect terminal.
|			
49			
50	VDD	-	Power supply terminal.
51	TEST3	O	TEST terminal.
52	TEST2		
53	TEST1		
54	TEST0		
55	FG	O	FG signal input terminal.
56	FEPSENS	O	AN8709 SENSE signal terminal.
57	CPUDTIO	O	AN8709 CPUDTIN signal terminal.
58	SCK	O	AN8709 SCK signal terminal.
59	(SBD)	I	YDC Flash writer SBD signal terminal.
60	(SBO)	I	YDC Flash writer SBO signal terminal.
61	(SBT)	I	YDC Flash writer SBT signal terminal.
62	UDRX	I	UART receiving signal terminal. (DEBUG side : not used)
63	UDTX	O	UART transmitting signal terminal. (DEBUG side)
64	FEPRES	O	AN8709 RESETsignal terminal.
65	UCRX	I	UART receiving signal terminal. (COMMAND side)
66	UCTX	O	UART transmitting signal terminal. (COMMAND side)
67	NC	-	No connect terminal.
68	VDD	-	Power supply terminal.
69	VSS	-	GND potential supply terminal.
70	AVSS	-	ANALOG GND potential supply terminal.
71	Vref-	-	ANALOG standard (-) voltage terminal.
72	HALFSENS	I	VHALF power supply terminal.
73	SLEDSENS	I	SLED control signal input terminal.
74	HITEMP	I	High-temperature signal input terminal.
75	LOTEMP	I	Low-temperature signal input terminal.
76	NC	-	No connect terminal.
|			
78			
79	MODE_SEL	I	Discrimination input terminal of correspondence both 8cm Disc and CD (connected pull-up)/or not (connected pull-down).
80	SDA	I/O	E2P-ROM SDA signal terminal.
81	SCL	O	E2P-ROM SCL signal terminal.
82	DCFLTCNT	O	FEP filter switching terminal.
83	HFMCNT	O	High-frequency upon another control output terminal. (connected pull-down)
84	DRVCNT1	O	Driver logic control output-1 terminal. (connected pull-down by internal IC)
85	DRVCNT2	O	Driver logic control output-2 terminal. (connected pull-down by internal IC)
86	VREF+	-	Analog standard (+) voltage terminal.
87	AVDD	-	Analog power supply terminal.
88	PLAYA	O	SLED-2 driving control D/A output-A terminal.
89	PLAYB	O	4 SLED-2 driving control D/A output-B terminal.
90	LOADOUT	O	LOAD MOTOR control D/A output terminal.
91	NC	-	No connect terminal.
|			
93			

TO SCHEMATIC
TO CONTENTS

No.	Symbol	I/O	Terminal Description
94	/WE	O	MN103S26E WRITE ENABLE output terminal.
95	NC	-	No connect terminal.
96	/RE	O	MN103S26E READ ENABLE output terminal.
97	/CS	O	MN103S26E CHIP SELECT output terminal.
98	VDD	-	Power supply terminal.
99	VSS	-	GND potential supply terminal.
100	NC	-	No connect terminal.
I			
102			
103	CPUADR0	O	Address output-0 terminal.
104	CPUADR1	O	Address output-1 terminal.
105	CPUADR2	O	Address output-2 terminal.
106	CPUADR3	O	Address output-3 terminal.
107	CPUADR4	O	Address output-4 terminal.
108	CPUADR5	O	Address output-5 terminal.
109	CPUADR6	O	Address output-6 terminal.
110	CPUADR7	O	Address output-7 terminal.
111	CPUADR8	O	Address output-8 terminal.
112	NC	-	No connect terminal.
113			
114	CPUADR9	O	Address output-9 terminal.
115	CPUADR10	O	Address output-10 terminal.
116	CPUADR11	O	Address output-11 terminal.
117	CPUADR12	O	Address output-12 terminal.
118	CPUADR13	O	Address output-13 terminal.
119	VDD	-	Power supply terminal.
120	NC	-	No connect terminal.
121	CPUADR14	O	Address output-14 terminal.
122	CPUADR15	O	Address output-15 terminal.
123	CPUADR16	O	Address output-16 terminal.
124	CPUADR17	O	Address output-17 terminal.
125	NC	-	No connect terminal.
I			
128			

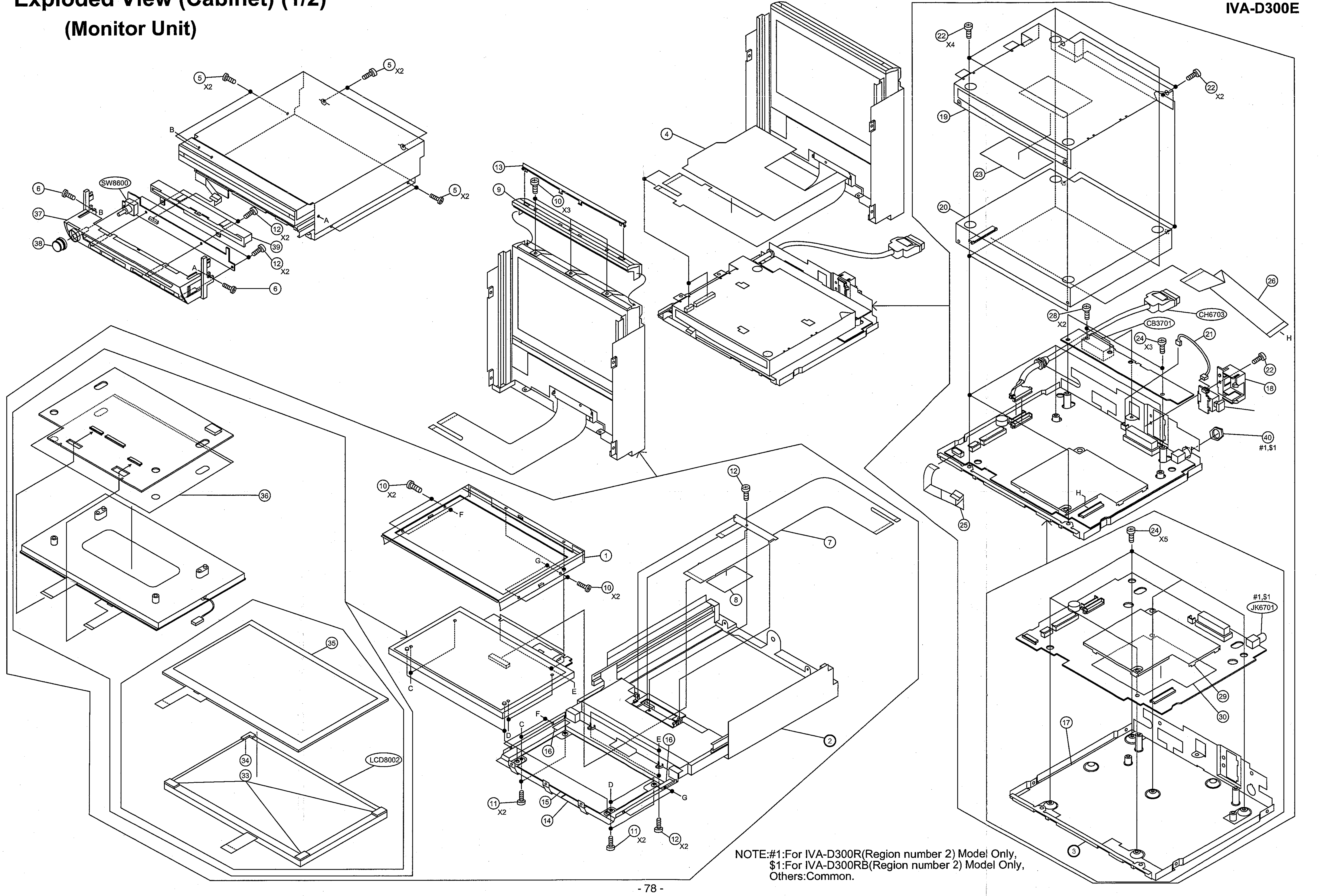
TO SCHEMATIC TO CONTENTS

TO PARTS LIST

TO CONTENTS

Exploded View (Cabinet) (1/2)

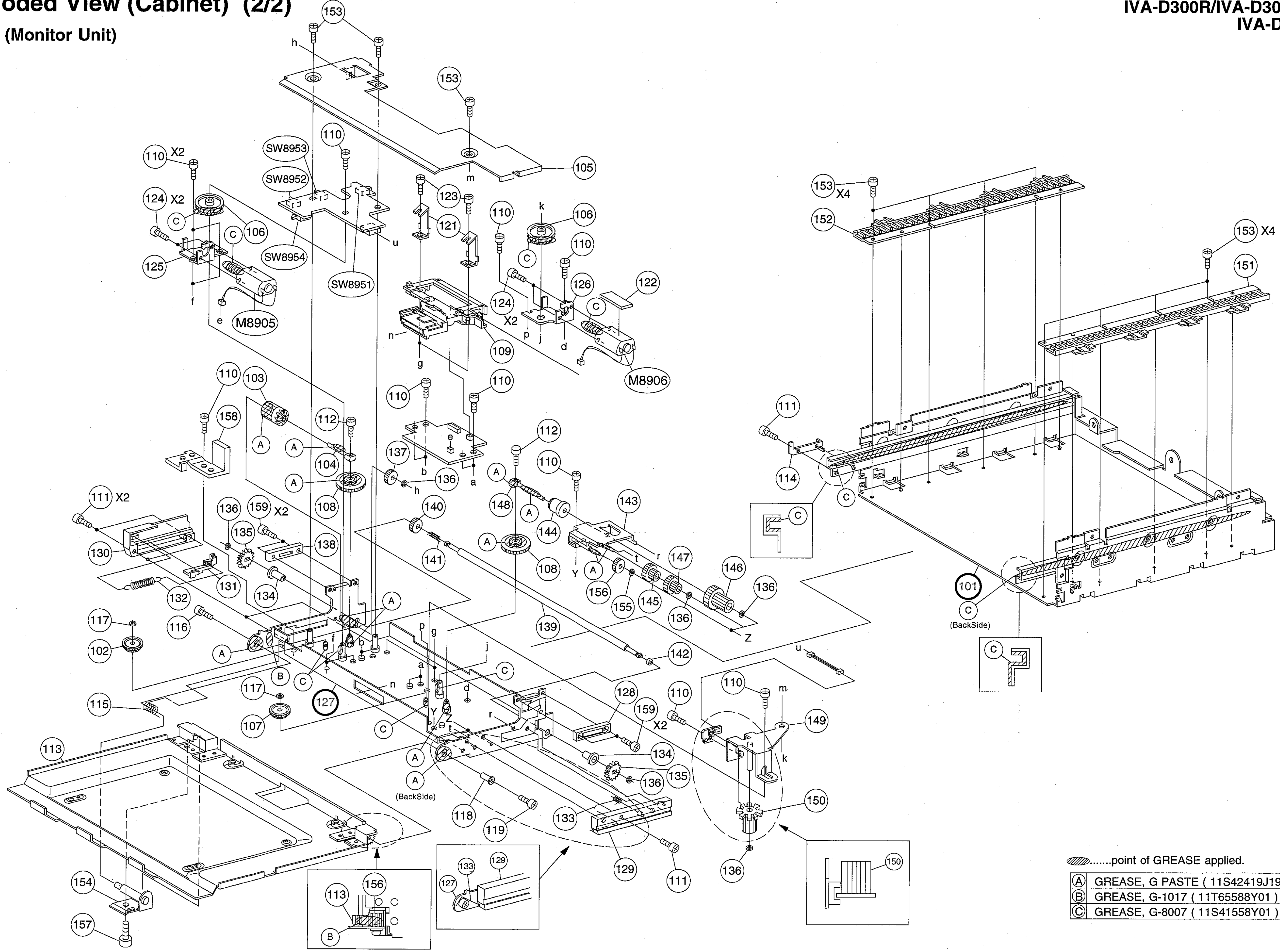
(Monitor Unit)


5 X2
5 X2
5 X2
B
A
6
SW8600
37
B
38
12 X2
39
12 X2
A
6
13
9
10 X3
4
22 X4
22 X2
19
23
20
26
H
CH6703
28 X2
CB3701
24 X3
21
22
18
40 #1,$1
25
H
10 X2
F
1
G
10 X2
12
7
8
36
C
E
2
F
C
16
E 16
D
D
11 X2
15
14
G
11 X2
12 X2
35
LCD8002
34
33
24 X5
#1,$1
JK6701
29
30
17
3

NOTE:#1:For IVA-D300R(Region number 2) Model Only,
$1:For IVA-D300RB(Region number 2) Model Only,
Others:Common.

Exploded View (Cabinet) (2/2)

(Monitor Unit)


153
h
153
110
SW8953
SW8952
SW8954
SW8951
110 X2
124 X2
C
106
C
125
f
e
M8905
105
m
123
121
u
n
g
109
110
106
k
110
C
126
122
124
X2
p
j
d
C
M8906
153 X4
152
153 X4
151
110
103
158
A
A
104
112
110
110
137
b
136
a
h
e
A
108
111 X2
130
136
159 X2
135
138
131
132
134
140
141
112
110
A
148
A
144
143
A
108
Y
A
156
155
145
147
136
146
136
t
r
Z
139
142
111
114
C
C
101
C
(BackSide)
C
A
117
116
102
A
B
C
127
117
107
f
b
a
n
p
g
j
C
d
Y
Z
t
C
r
A
A
(BackSide)
128
159
X2
110
134
135
136
110
m
149
k
u
150
136
115
113
154
157
113
156
B
118
119
133
129
111
133
129
127
150

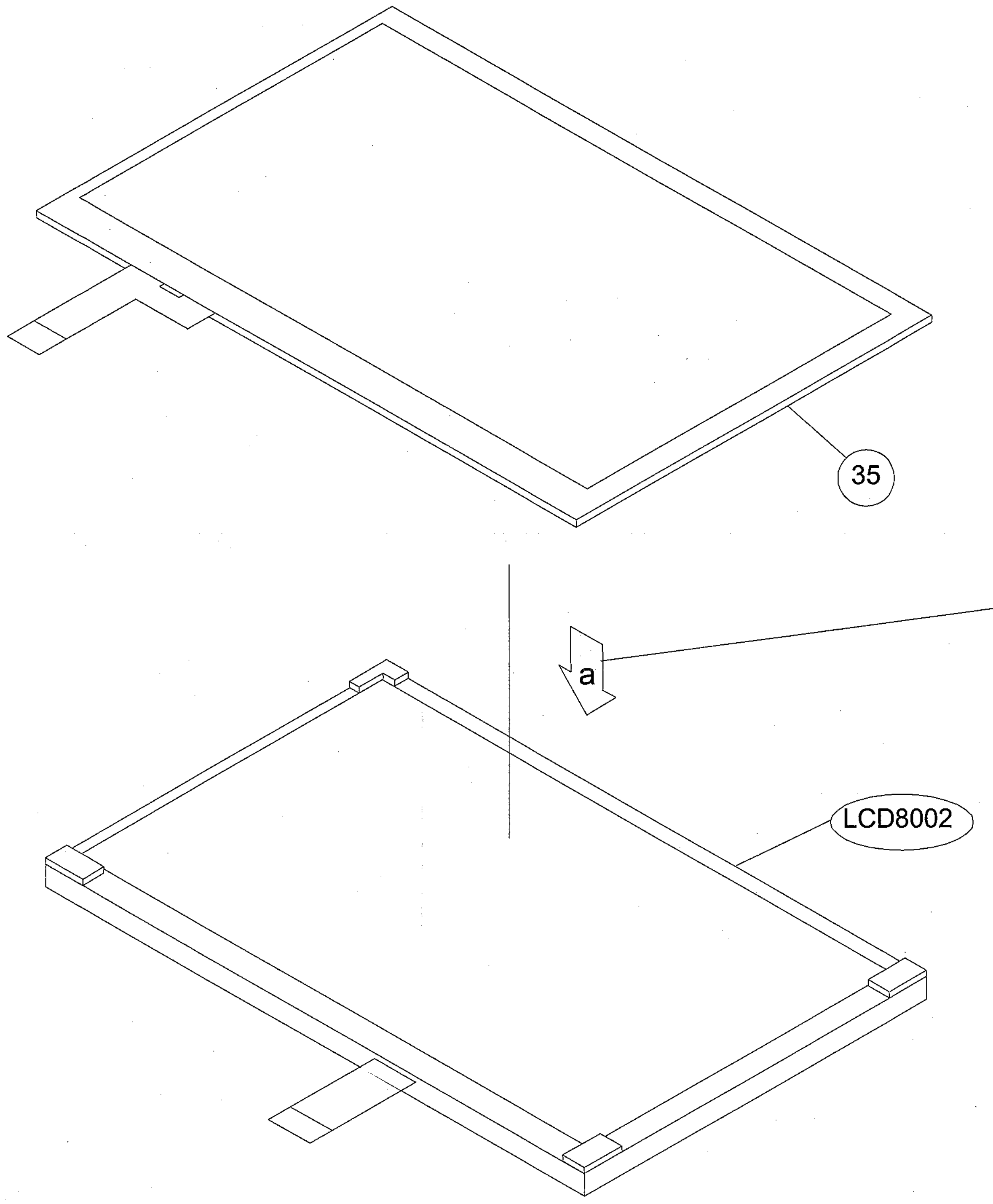
▨.......point of GREASE applied.

Ⓐ	GREASE, G PASTE (11S42419J19)
Ⓑ	GREASE, G-1017 (11T65588Y01)
Ⓒ	GREASE, G-8007 (11S41558Y01)

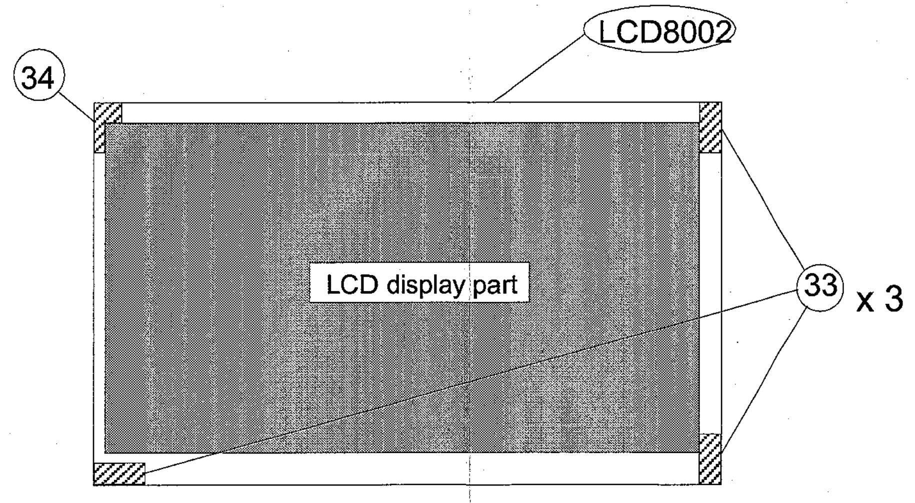
About LCD panel change

* touch panel / LCD panel handling notes

1. Impossible external force, such as one-point concentration, does not add to the panel surface.
2. In case you deal with it, hold and deal with panel edge as much as possible.
3. Deal with it so that there are not garbage, a crack, dirt, etc., and be sure to check at each process.
4. They are the thing of finger sack use, and a finger sack (11T75473W01-05) in a clean booth.



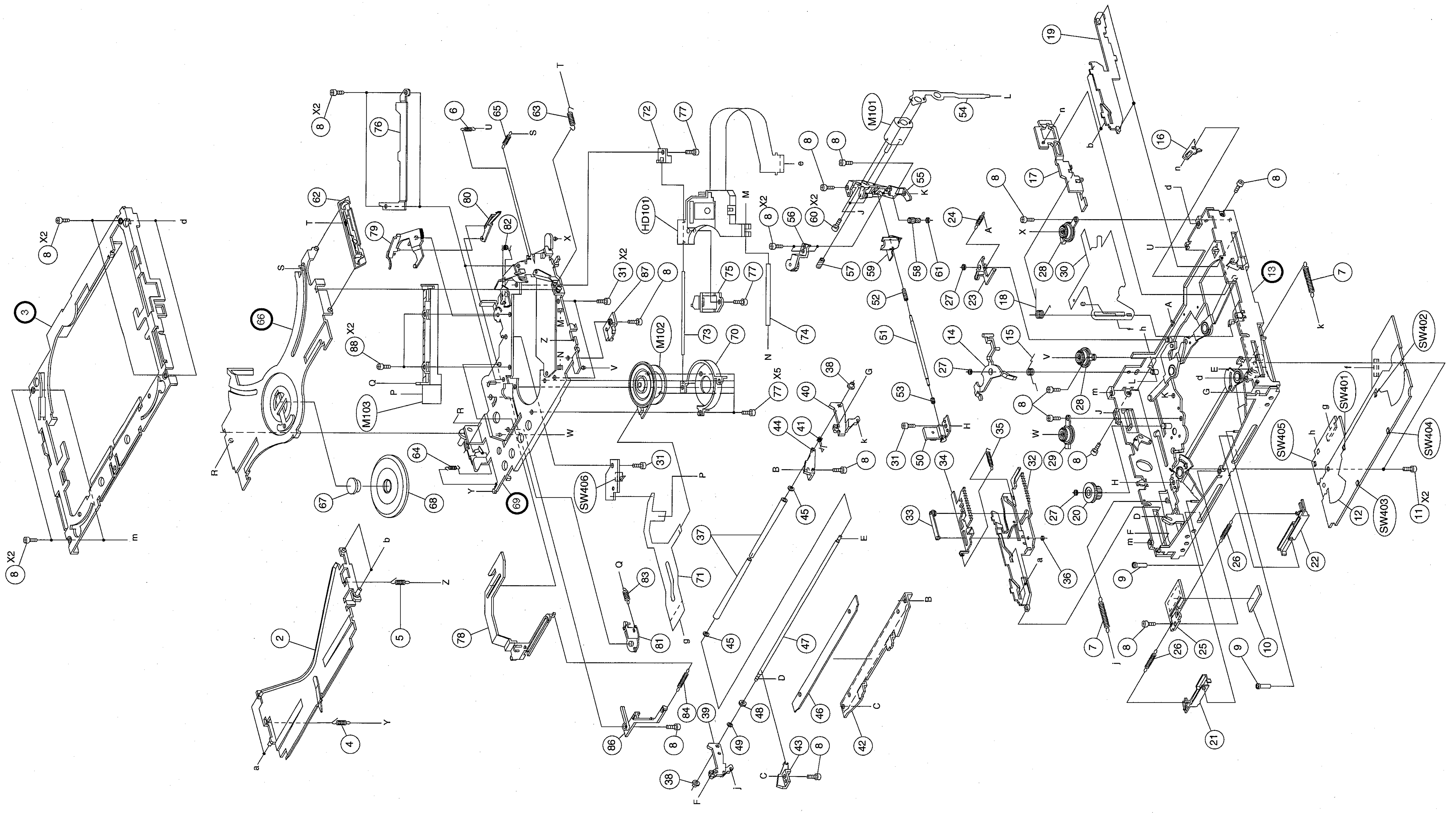
[Figure]



* Stick ㉝ and ㉞ according to the four corners of LCD8002.
* Don't run aground in a LCD display part.

Exploded View (DVD Deck Mechanism)

(DV33M01B)


3
8 X2
8 X2
2
4
5
66
62
76
8 X2
88 X2
M103
67
68
64
69
78
86
80
79
82
6
65
63
87
31 X2
8
SW406
31
81
83
71
84
8
72
77
HD101
M102
70
73
75
77
74
77 X5
37
45
45
47
39
38
49
48
43
8
46
42
M101
54
8
8
60 X2
8 X2
56
55
57
59
58
61
24
52
51
53
38
40
44
41
8
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14
27
15
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28
29
8
20
27
17
16
8
28
30
18
19
13
7
SW402
SW401
SW405
SW404
SW403
12
11 X2
22
26
7
9
8
25
26
10
9
21

* Tuner Unit Block

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NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

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Specifications

<FM RADIO>

Intermediate Frequency	10.7±0.1MHz
Frequency Range	87.5 to 108MHz
Usable Sensitivity (Mono, 3% Dist., at 98.1MHz)	20.2dBf
Quieting Sensitivity (50dB S/N, Mono, at 98.1MHz)	20.2dBf
-3dB Limiting Sensitivity (at 98.1MHz)	23.2dBf
Residual Noise (Ref. 400Hz (WID), at 98.1MHz)	28±10dB(#1,$1) 33±10dB(%1,&1)
S/N Ratio (at 98.1MHz)	Stereo : 55dB Mono : 60dB
Image Rejection (at 106.1MHz)	40dB
IF Rejection (at 90.1MHz)	60dB
Distortion (Input 60dBu, at 98.1MHz)	1.0%
Frequency Response (Ref. 400Hz, at 98.1MHz)	100Hz : 0±3dB 10kHz : -10±3dB
Stereo Separation (1kHz, at 98.1MHz)	20dB
PS Sensitivity (at 98.1MHz)	36.2dBf(#1,$1)

<MW RADIO>(#1,$1)

Intermediate Frequency	1st. IF : 10.7MHz 2nd. IF : 450kHz
Frequency Range	531 to 1,602kHz
Usable Sensitivity (20dB S/N, at 999kHz)	36dB
S/N Ratio (at 9990kHz)	44dB
Image Rejection (at 1,404kHz)	50dB
IF Rejection (at 603kHz)	60dB
Distortion (at 999kHz)	1.5%
Frequency Response (Ref. 400Hz, at 999kHz)	100Hz : -3±4dB 2.5kHz : -3+4, -6dB

<LW RADIO>(#1,$1)

Intermediate Frequency	1st. IF : 10.7MHz 2nd. IF : 450kHz
Frequency Range	153 to 281kHz
Usable Sensitivity (20dB S/N, at 216kHz)	42dB
S/N Ratio (at 216kHz)	44dB
Image Rejection (at 270kHz)	50dB
IF Rejection (at 162kHz)	60dB
Distortion (at 216kHz)	1.5%
Frequency Response (Ref. 400Hz, at 216kHz)	100Hz : -3±4dB 2.5kHz : -3+4, -6dB

NOTE: #1 : For IVA-D300R (Region Number 2) Only, $1 : For IVA-D300RB (Region Number 2) Only, %1 : For IVA-D300E (Region Number 3) Only, %1 : For IVA-D300E (Region Number 4) Only, Others : Common.

TO CONTENTS

<AM RADIO>(%1,&1)

Intermediate Frequency	1st. IF : 10.7MHz 2nd. IF : 450kHz
Frequency Range	531 to 1,602kHz
Usable Sensitivity (20dB S/N, at 999kHz)	36dB
S/N Ratio (at 999kHz)	44dB
Image Rejection (at 1,404kHz)	50dB
IF Rejection (at 603kHz)	60dB
Distortion (at 999kHz)	1.5%
Frequency Response (Ref. 400Hz, at 999kHz)	100Hz : -3±4dB 2.5kHz : -3+4, -6dB

<GENERAL>

Power Supply	DC14.4V
Power Output (Ref. TCD-782(0dB/1kHz), T.H.D. 10%) /Impedance	16W/ch/4ohm
Pre Output (TCD-782 (0dB/1kHz), T.H.D. 1%, FRONT/REAR/SUB-W)/Impedance	2V±2.5dBV/ch/10kohm
SUB-W Output Level (TCD-782 (0dB/1kHz), SUB-W : STEP 0, Ref. FRONT PRE-OUT)	-15±3dB
Dimensions (W x H x D)	170 x 40 x 275mm
Weight	1.2kg

NOTES : * Due to Continuing product improvement, specifications and designs are subject to change without notice.
* #1 : For IVA-D300R (Region Number 2) Only, $1 : For IVA-D300RB (Region Number 2) Only,
%1 : For IVA-D300E (Region Number 3) Only, %1 : For IVA-D300E (Region Number 4) Only,
Others : Common.

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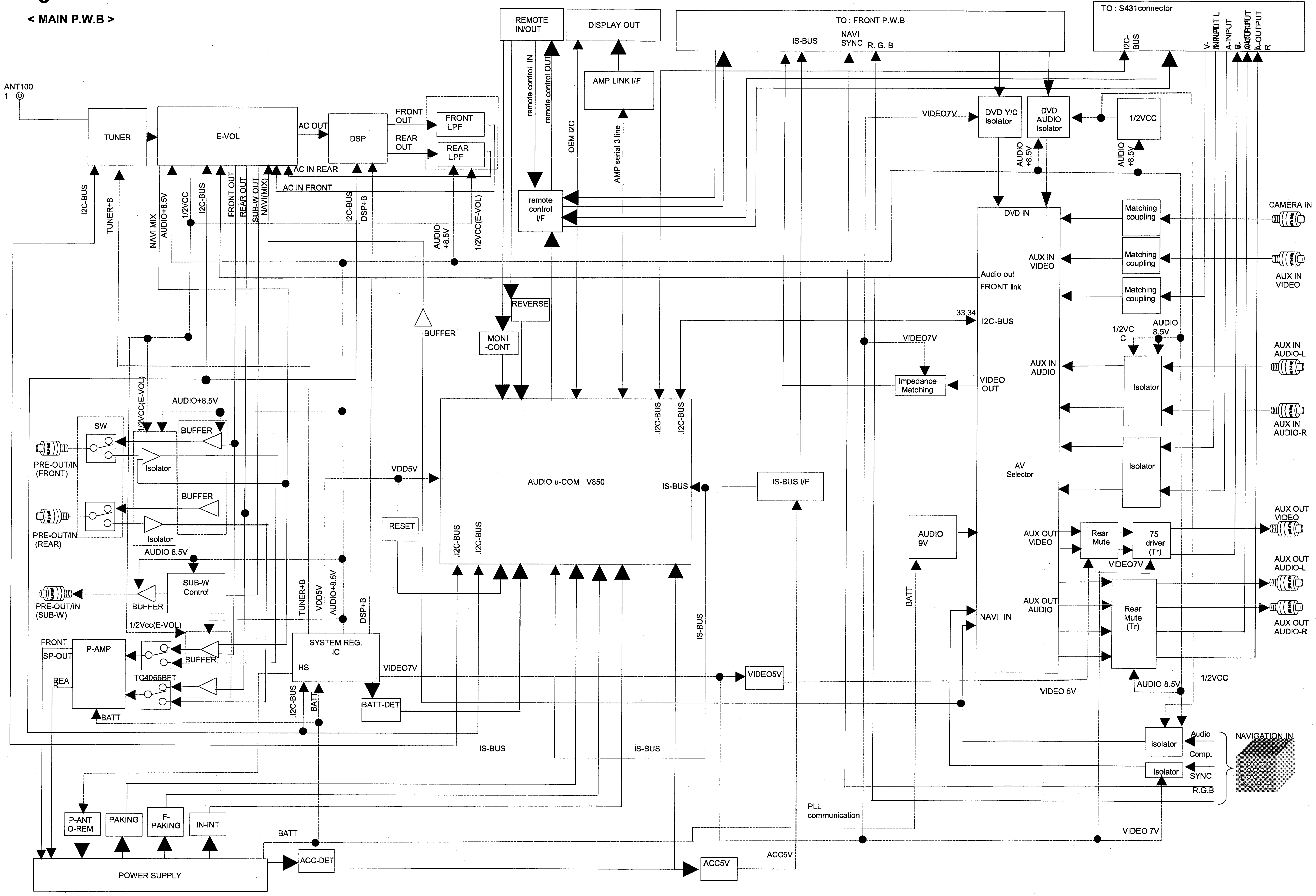
Block Diagram

< MAIN P.W.B >


ANT100
1
TUNER
E-VOL
AC OUT
DSP
FRONT OUT
REAR OUT
FRONT LPF
REAR LPF
AC IN REAR
AC IN FRONT
I2C-BUS
TUNER+B
NAVI MIX
AUDIO+8.5V
1/2VCC
I2C-BUS
FRONT OUT
REAR OUT
SUB-W OUT
NAVI(MIX)
I2C-BUS
DSP+B
AUDIO +8.5V
1/2VCC(E-VOL)
REMOTE IN/OUT
DISPLAY OUT
remote control IN
remote control OUT
OEM I2C
AMP LINK I/F
AMP serial 3 line
remote control I/F
REVERSE
MONI -CONT
BUFFER
TO : FRONT P.W.B
IS-BUS
NAVI SYNC
R. G. B
TO : S431connector
I2C-BUS
V-INPUT
L A-INPUT
R-A-INPUT
L A-OUTPUT
R A-OUTPUT
VIDEO7V
DVD Y/C Isolator
DVD AUDIO Isolator
1/2VCC
AUDIO +8.5V
AUDIO +8.5V
DVD IN
Matching coupling
Matching coupling
Matching coupling
CAMERA IN
AUX IN VIDEO
AUX IN VIDEO
Audio out
FRONT link
33 34
I2C-BUS
VIDEO7V
Impedance Matching
VIDEO OUT
1/2VCC
AUDIO 8.5V
AUX IN AUDIO-L
AUX IN AUDIO
Isolator
AUX IN AUDIO-R
Isolator
AV Selector
AUDIO 9V
BATT
AUX OUT VIDEO
Rear Mute
75 driver (Tr)
VIDEO7V
AUX OUT VIDEO
AUX OUT AUDIO-L
AUX OUT AUDIO
Rear Mute (Tr)
NAVI IN
AUX OUT AUDIO-R
AUDIO 8.5V
1/2VCC
VIDEO 5V
Isolator
Audio
Comp.
Isolator
SYNC
R.G.B
NAVIGATION IN
VIDEO 7V
AUDIO+8.5V
SW
BUFFER
1/2VCC(E-VOL)
Isolator
PRE-OUT/IN (FRONT)
BUFFER
Isolator
PRE-OUT/IN (REAR)
AUDIO 8.5V
SUB-W Control
BUFFER
PRE-OUT/IN (SUB-W)
1/2Vcc(E-VOL)
FRONT SP-OUT
P-AMP
REAR
TC4066BFT
BUFFER
BATT
VDD5V
RESET
AUDIO u-COM V850
I2C-BUS
I2C-BUS
IS-BUS
I2C-BUS
I2C-BUS
IS-BUS I/F
TUNER+B
VDD5V
AUDIO+8.5V
DSP+B
SYSTEM REG. IC
HS
VIDEO7V
I2C-BUS
BATT
BATT-DET
IS-BUS
VIDEO5V
IS-BUS
IS-BUS
PLL communication
P-ANT O-REM
PAKING
F-PAKING
IN-INT
BATT
ACC-DET
ACC5V
ACC5V
POWER SUPPLY

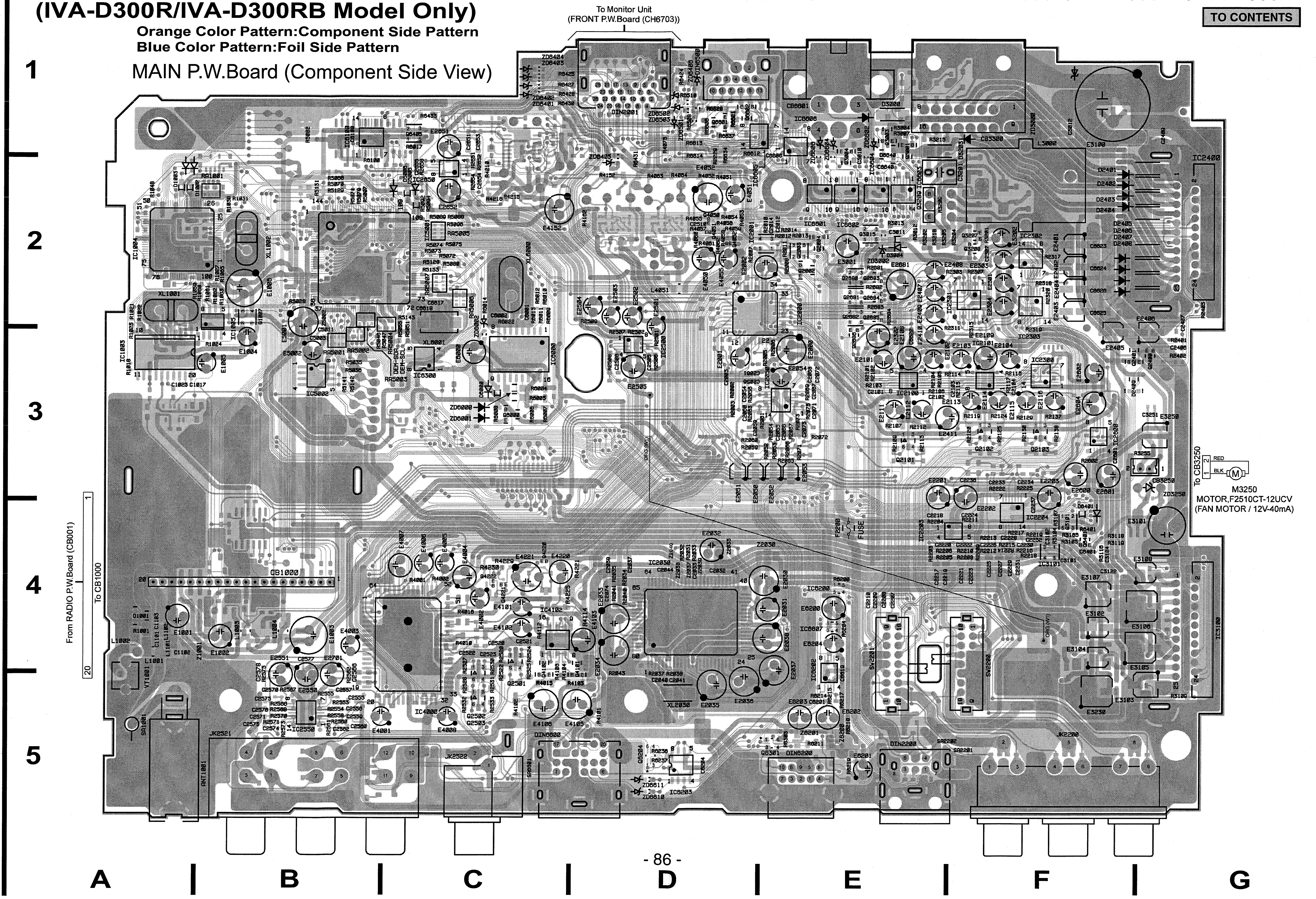
TO CONTENTS

Parts Layout on P.W.Boards and Wiring Diagram (1/5)

(IVA-D300R/IVA-D300RB Model Only)

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

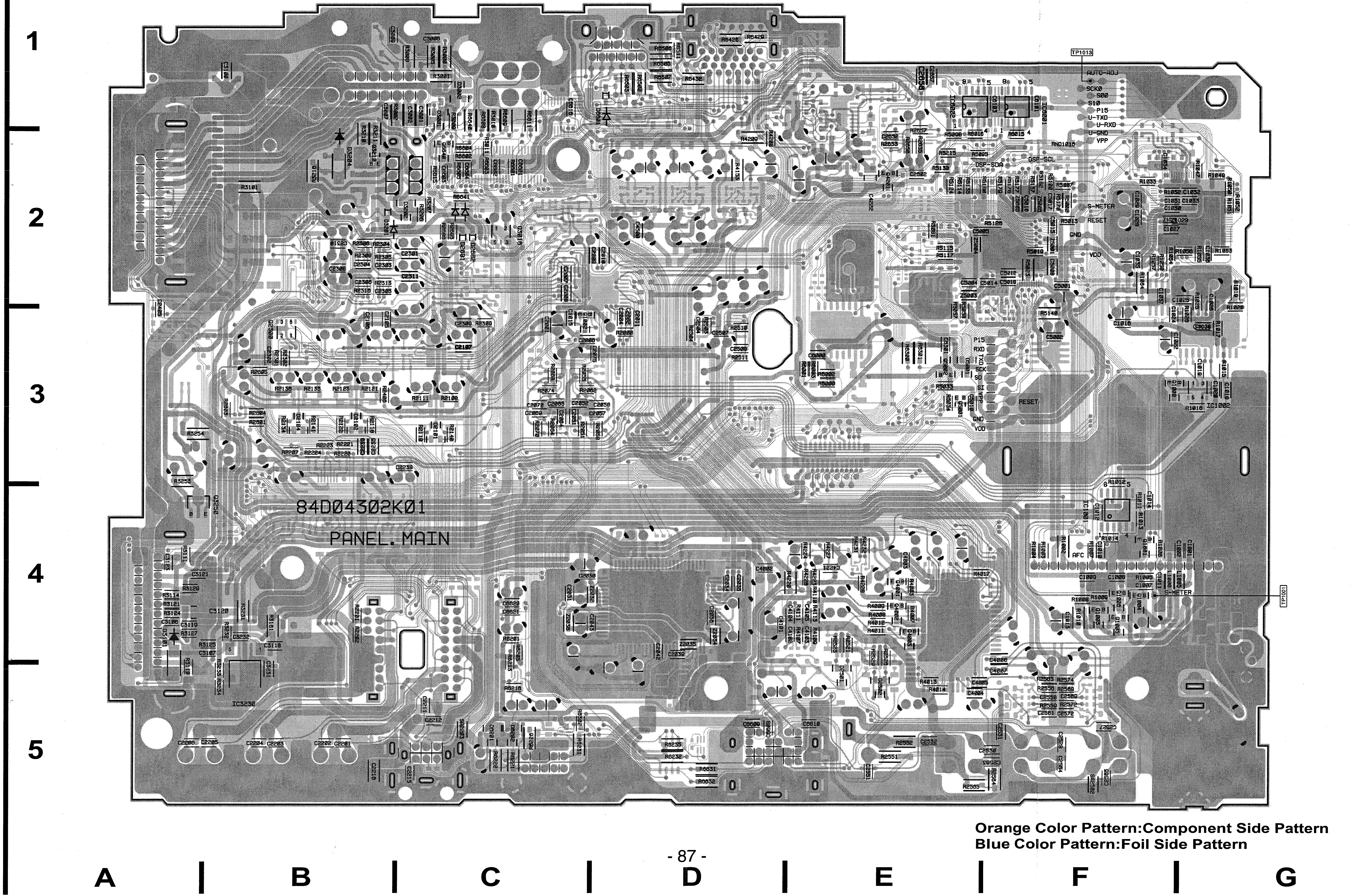
MAIN P.W.Board (Component Side View)


To Monitor Unit
(FRONT P.W.Board (CH6703))
DIN2001
IC2400
IC1004
IC1003
XL1001
XL1002
XL6001
XL6000
IC6000
IC6300
IC5002
IC2000
IC2100
IC2300
IC2303
IC2204
IC2600
IC3101
IC3100
IC2030
IC4000
IC4102
IC6200
IC6202
IC6203
IC2550
CB1000
Z1001
Z2030
XL2030
SW2201
SW2200
JK2521
JK2522
JK2200
DIN6000
DIN6200
DIN2200
ANT1001
SA1001
F2200
FUSE
From RADIO P.W.Board (CB001)
To CB1000
To CB3250
RED
BLK
M
M3250
MOTOR,F2510CT-12UCV
(FAN MOTOR / 12V-40mA)
1
2
3
4
5
A
B
C
D
E
F
G

TO CONTENTS

Parts Layout on P.W.Boards and Wiring Diagram (2/5)

(IVA-D300R/IVA-D300RB Model Only) MAIN P.W.Board (Foil Side View)


1
2
3
4
5
A
B
C
D
E
F
G
84D04302K01
PANEL.MAIN
TP1013
AUTO-ADJ
SCK0
S00
SI0
P15
U-TXD
U-RXD
U-GND
VPP
DSP-SCL
DSP-SDA
S-METER
RESET
GND
VDD
P15
RXD
TXD
SCK
SO
SI
VPP
RESET
GND
VDD
IC1002
IC1001
AFC
S-METER
TP1001
IC3230

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

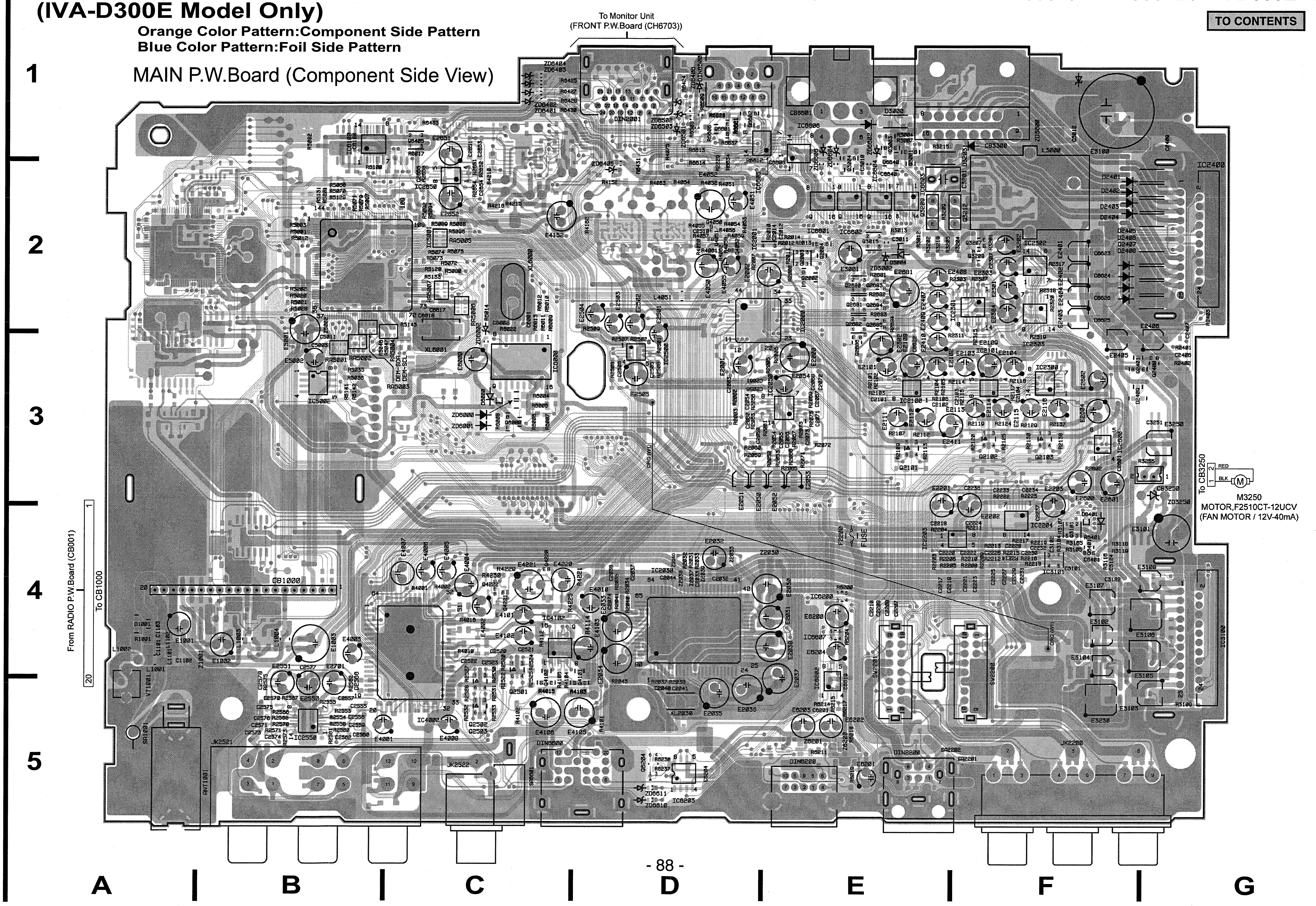
Parts Layout on P.W.Boards and Wiring Diagram (3/5)

(IVA-D300E Model Only)

TO CONTENTS

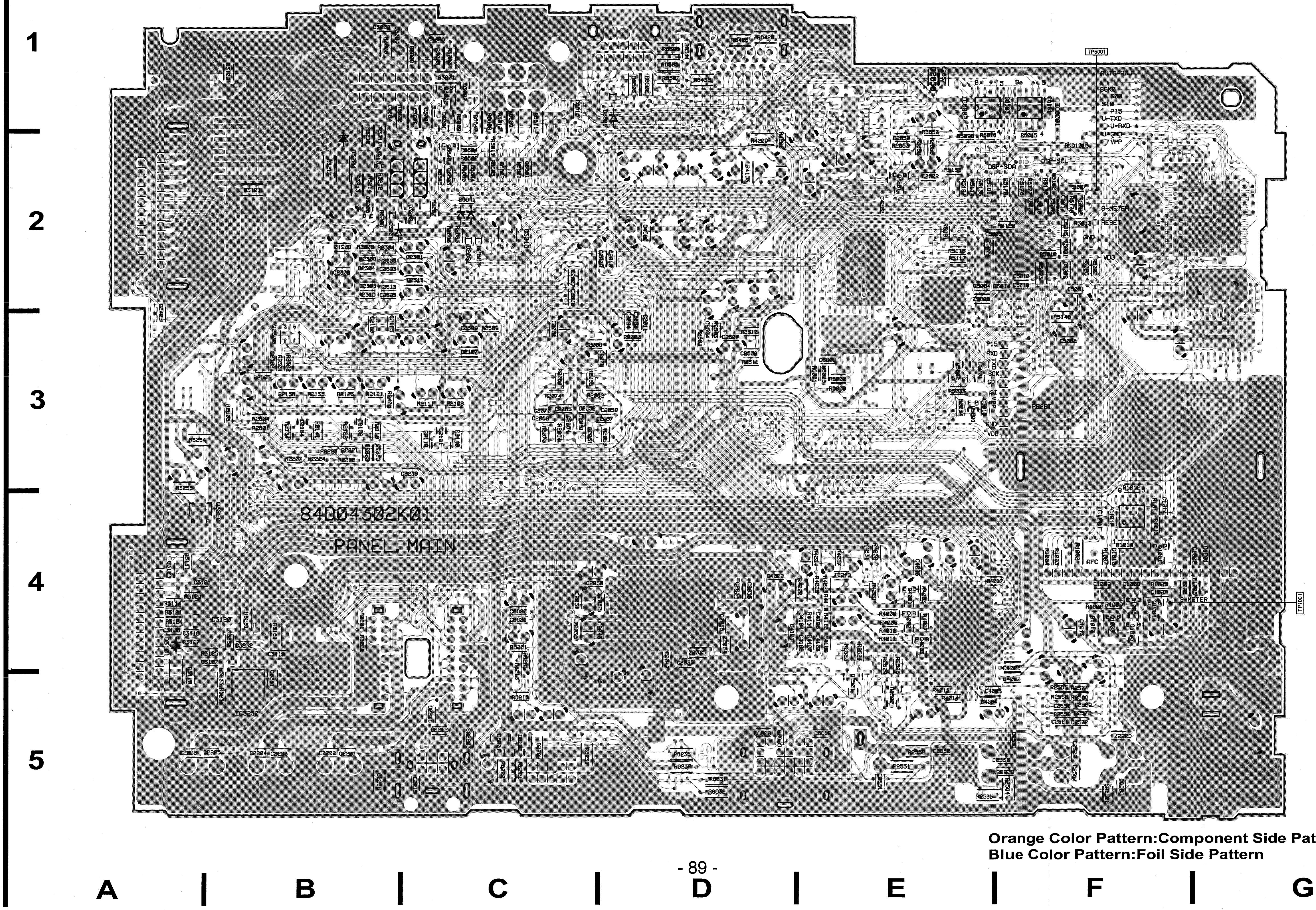
Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

MAIN P.W.Board (Component Side View)


To Monitor Unit
(FRONT P.W.Board (CH6703))
From RADIO P.W.Board (CB001)
To CB1000
To CB3250
RED
BLK
M3250
MOTOR,F2510CT-12UCV
(FAN MOTOR / 12V-40mA)
DIN2001
CB6001
IC6600
IC2400
IC5001
IC6000
XL6001
IC5002
IC2000
IC2030
IC2100
IC2101
IC2300
IC2303
IC2204
IC3101
IC3100
IC4000
IC4102
IC2550
IC6200
IC6202
IC6203
CB1000
CB3250
XL2030
SW2201
SW2200
JK2521
JK2522
DIN6000
DIN6200
DIN2200
JK2200
ANT1001
SR1001
F2200
FUSE
E3101
E3100
1
2
3
4
5
A
B
C
D
E
F
G

Parts Layout on P.W.Boards and Wiring Diagram (4/5)
(IVA-D300E Model Only)

MAIN P.W.Board (Foil Side View)


1
2
3
4
5
A
B
C
D
E
F
G
84D04302K01
PANEL.MAIN
TP5001
AUTO-ADJ
SCK0
SO0
SI0
P15
U-TXD
U-RXD
U-GND
VPP
DSP-SDA
DSP-SCL
S-METER
RESET
GND
VDD
P15
RXD
TXD
SCK
SO
SI
VPP
GND
VDD
RESET
AFC
S-METER
TP1001
IC3230

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (5/5)

1

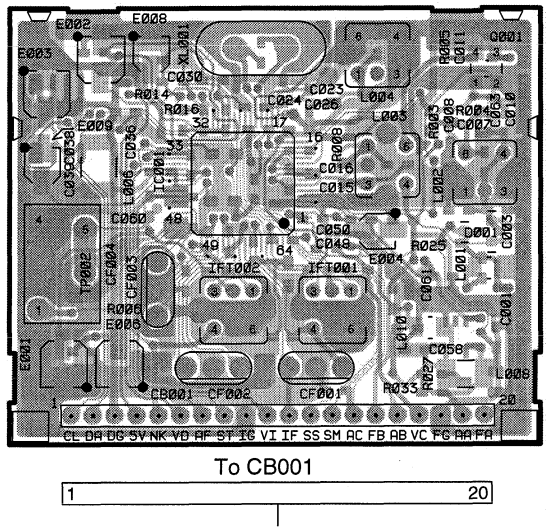
2

3

4

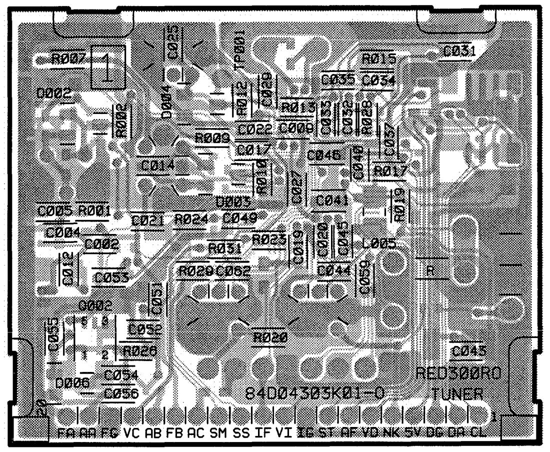
5

RADIO P.W.Board (Component Side View)
(IVA-D300R/IVA-D300RB Model Only)

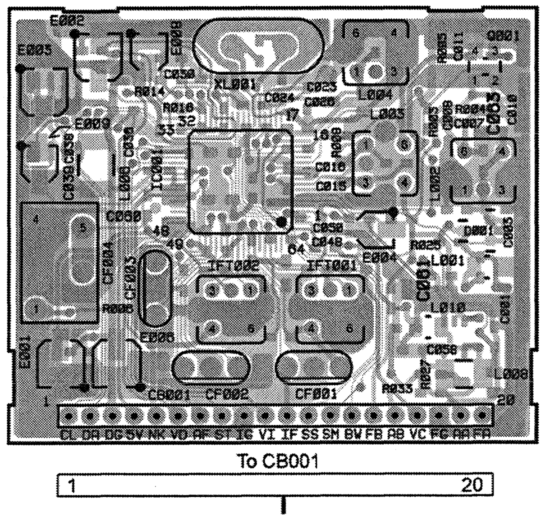

CL DA DG 5V NK VD AF ST IG VI IF SS SM AC FB AB VC FG AA FA
To CB001
1
20

From MAIN P.W.Board (CB1000)

RADIO P.W.Board (Foil Side View)
(IVA-D300R/IVA-D300RB Model Only)

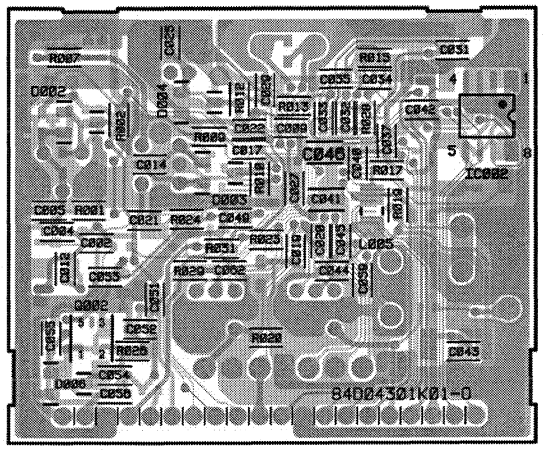

84D04303K01-0
RED300RO TUNER
FA AA FG VC AB FB AC SM SS IF VI IG ST AF VD NK 5V DG DA CL

RADIO P.W.Board (Component Side View)
(IVA-D300E Model Only)


CL DA DG 5V NK VD AF ST IG VI IF SS SM BV FB AB VC FG AA FA
To CB001
1
20

From MAIN P.W.Board (CB1000)

RADIO P.W.Board (Foil Side View)
(IVA-D300E Model Only)


84D04301K01-0
IC002

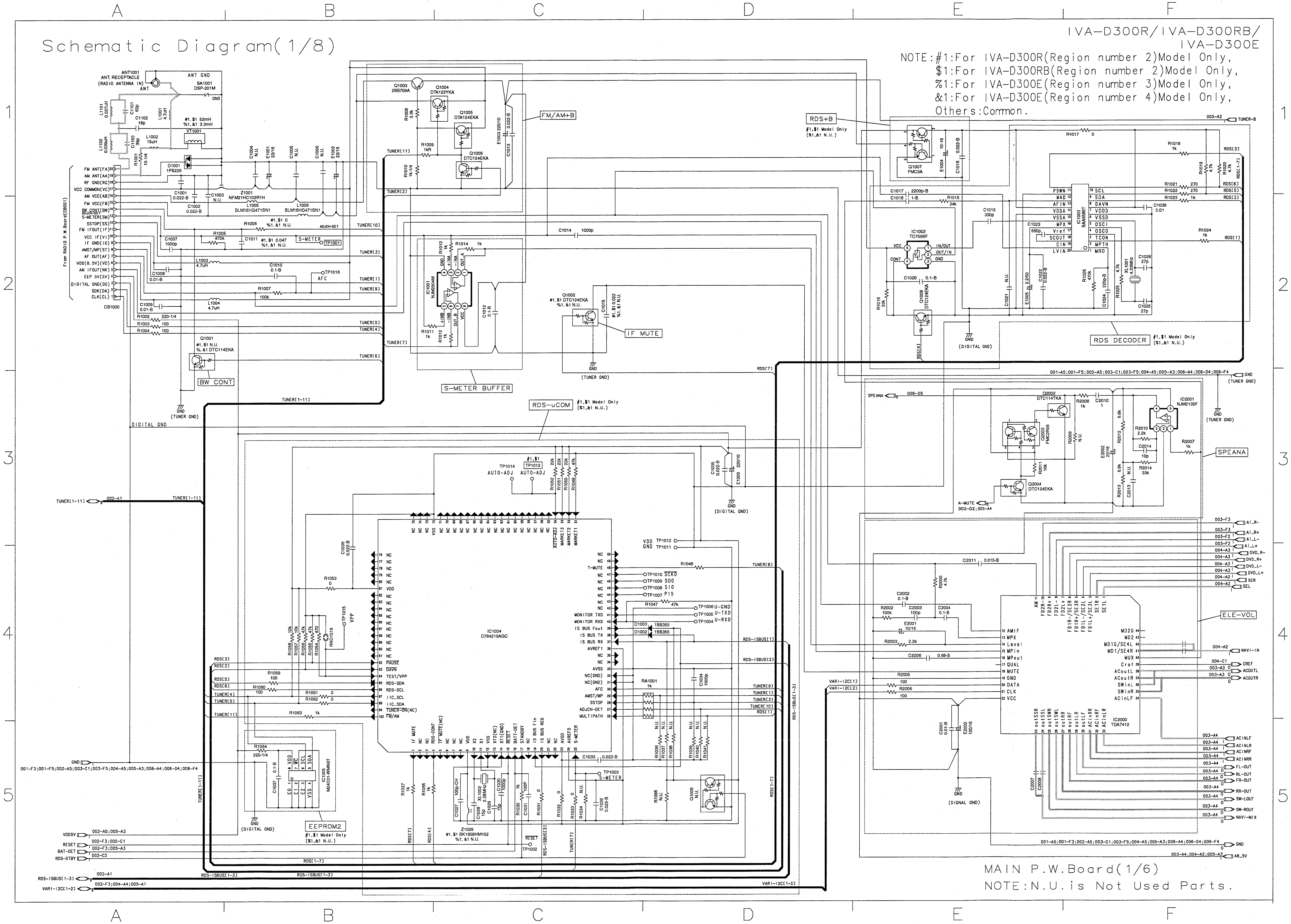
Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

A B C D E F G

Schematic Diagram(1/8)

IVA-D300R/IVA-D300RB/
IVA-D300E

NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
%1:For IVA-D300E(Region number 3)Model Only,
&1:For IVA-D300E(Region number 4)Model Only,
Others:Common.

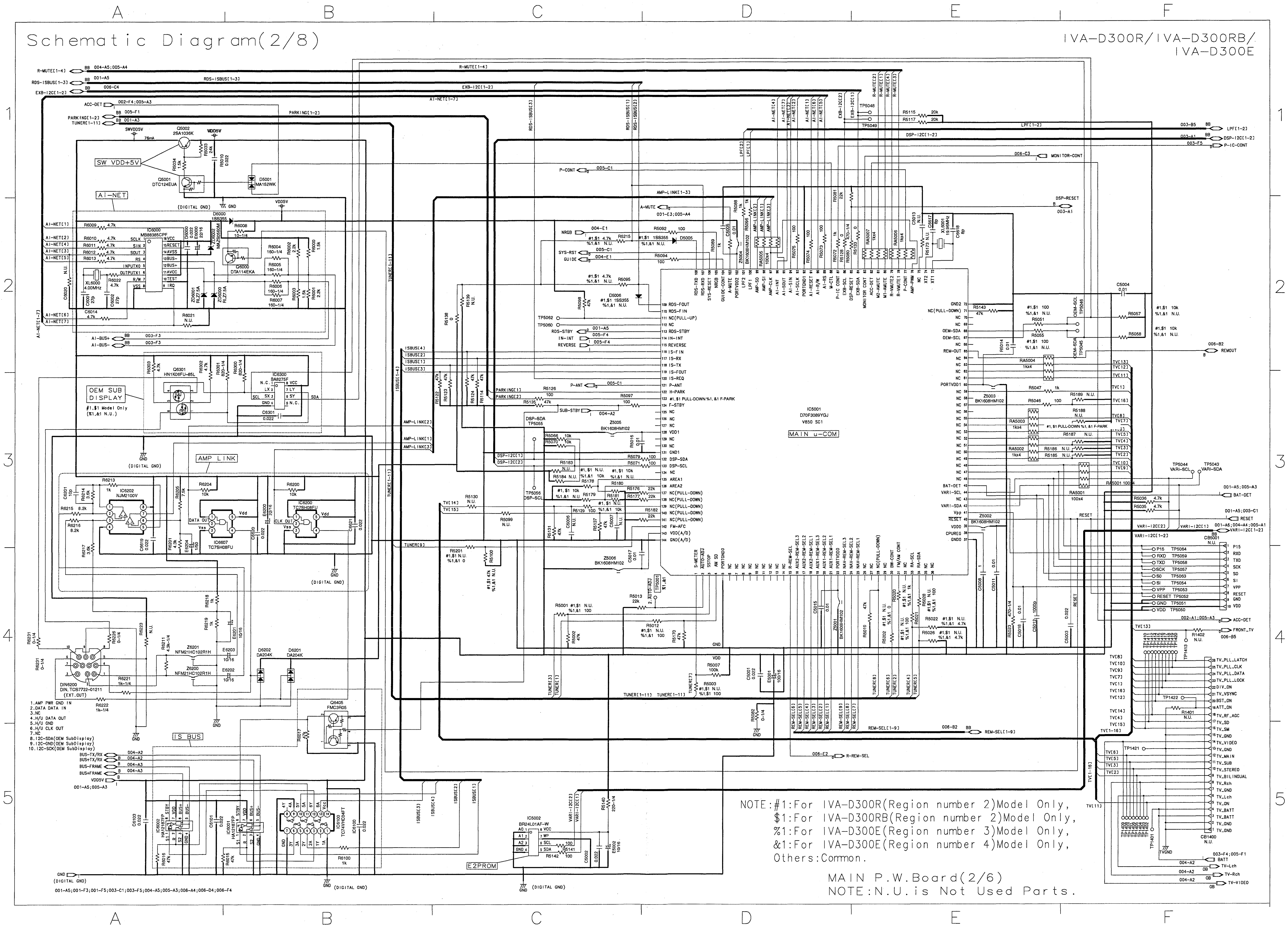

A
B
C
D
E
F
1
2
3
4
5
ANT1001
ANT.RECEPTACLE
(RADIO ANTENNA IN)
ANT GND
SA1001
DSP-201M
From RADIO P.W.Board(CB001)
CB1000
FM/AM+B
S-METER BUFFER
IF MUTE
BW CONT
RDS+B
RDS DECODER
RDS-uCOM
IC1004
D784216AGC
IC1002
TC7566F
IC1003
SAA6588T
IC1001
NJM2904M
IC2000
TDA7412
IC2001
NJM2130F
IC1005
M24C01-WMN6T
EEPROM2
ELE-VOL
SPEANA
DIGITAL GND
TUNER GND
SIGNAL GND
#1,$1 Model Only
(%1,&1 N.U.)

MAIN P.W.Board(1/6)
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD **TO PARTS LIST** **TO CONTENTS**

Schematic Diagram(2/8)

IVA-D300R/IVA-D300RB/IVA-D300E


A
B
C
D
E
F
1
2
3
4
5
SW VDD+5V
Ai-NET
OEM SUB DISPLAY
#1,$1 Model Only (%1,&1 N.U.)
AMP LINK
IS BUS
E2PROM
IC5001 D70F3089YGJ V850 SC1
MAIN u-COM
IC6000 MB88385CPF
IC6300 BA8275F
IC6202 NJM2100V
IC6200 TC7SH08FU
IC6607 TC7SH08FU
IC5002 BR24L01AF-W
IC6002 HA12187FP
IC6001 HA12187FP
IC6100 TC74VHC04FT
Q5002 2SA1036K
Q5001 DTC124EUA
D5001 MA152WK
Q6301 HN1K06FU-BL
Q6405 FMC3R05
DIN6200 DIN.TCS7722-01211 (EXT.OUT)
1.AMP PWR GND IN
2.DATA DATA IN
3.NC
4.H/U DATA OUT
5.H/U GND
6.H/U CLK OUT
7.NC
8.I2C-SDA(OEM SubDisplay)
9.I2C-GND(OEM SubDisplay)
10.I2C-SCK(OEM SubDisplay)
(DIGITAL GND)
001-A5;001-F3;001-F5;003-C1;003-F5;004-A5;005-A3;006-A4;006-D4;006-F4

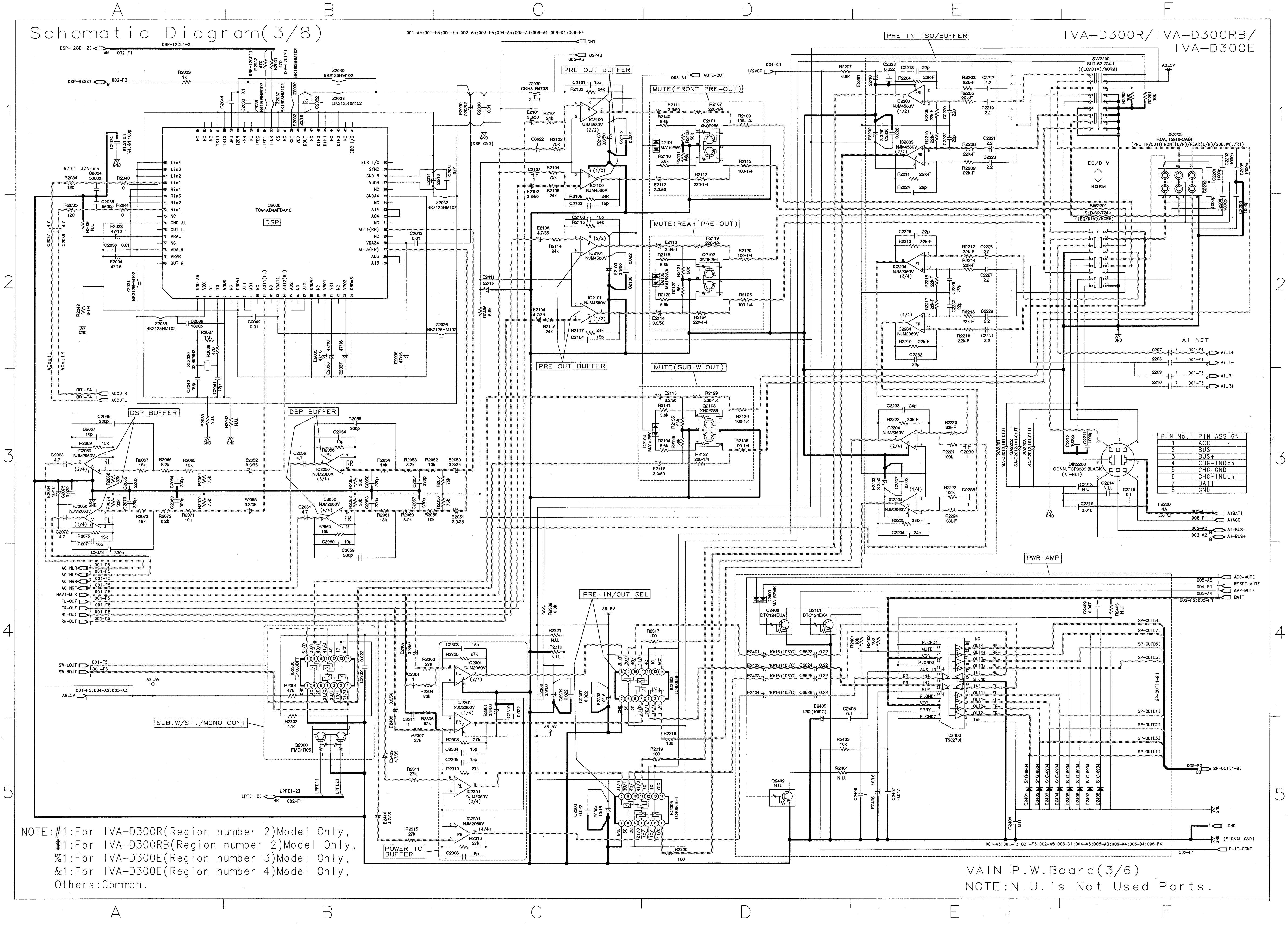
NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
%1:For IVA-D300E(Region number 3)Model Only,
&1:For IVA-D300E(Region number 4)Model Only,
Others:Common.

MAIN P.W.Board(2/6)
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(3/8)

IVA-D300R/IVA-D300RB/
IVA-D300E


DSP
IC2030
TC94A04AFD-015
DSP BUFFER
PRE OUT BUFFER
MUTE(FRONT PRE-OUT)
MUTE(REAR PRE-OUT)
MUTE(SUB.W OUT)
PRE IN ISO/BUFFER
EQ/DIV
NORM
SW2200
SW2201
JK2200
RCA,T5916-CABH
(PRE IN/OUT(FRONT(L/R)/REAR(L/R)/SUB.W(L/R))
DIN2200
CONN,TCP9389 BLACK
(Ai-NET)
Ai-NET
PWR-AMP
IC2400
TS8273H
PRE-IN/OUT SEL
SUB.W/ST./MONO CONT
POWER IC BUFFER
MAX1.33Vrms
Q2300
FMG1R05
Q2400
DTC124EUA
Q2401
DTC124EKA
Q2402
N.U.
IC2050
NJM2060V
IC2100
NJM4580V
IC2101
NJM4580V
IC2203
NJM4580V
IC2204
NJM2060V
IC2301
NJM2060V
IC2300
TC4066BFT
IC2302
TC4066BFT
IC2303
TC4066BFT
F2200
4A
AIBATT
AIACC
AI-BUS-
AI-BUS+
Ai_L+
Ai_L-
Ai_R-
Ai_R+
ACC-MUTE
RESET-MUTE
AMP-MUTE
BATT
SP-OUT[1-8]
GND
(SIGNAL GND)
P-IC-CONT
MUTE-OUT
DSP-RESET
DSP-I2C[1-2]
LPF[1-2]
ACOUTR
ACOUTL
ACINLR
ACINLF
ACINRR
ACINRF
NAVI-MIX
FL-OUT
FR-OUT
RL-OUT
RR-OUT
SW-LOUT
SW-ROUT
A8_5V
DSP+8
1/2VCC
A
B
C
D
E
F
1
2
3
4
5

PIN No.	PIN ASSIGN
1	ACC
2	BUS-
3	BUS+
4	CHG-INRch
5	CHG-GND
6	CHG-INLch
7	BATT
8	GND

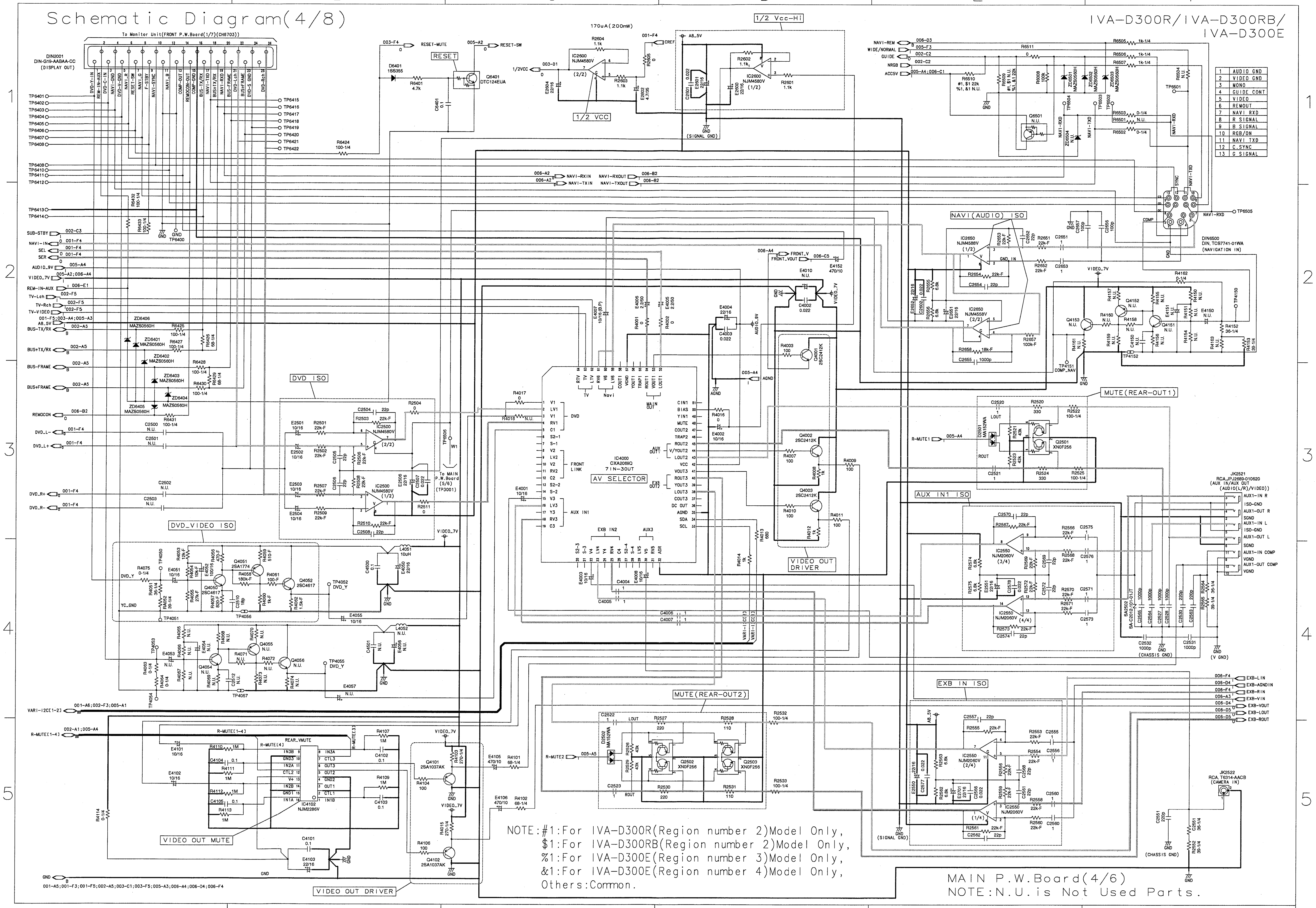
NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
%1:For IVA-D300E(Region number 3)Model Only,
&1:For IVA-D300E(Region number 4)Model Only,
Others:Common.

MAIN P.W.Board(3/6)
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(4/8)

IVA-D300R/IVA-D300RB/
IVA-D300E



A
B
C
D
E
F
1
2
3
4
5
To Monitor Unit(FRONT P.W.Board(1/7)(CH6703))
DIN2001
DIN-G19-AABAA-CC
(DISPLAY OUT)
RESET
Q6401
DTC124EUA
D6401
1SS355
170uA(200mW)
IC2600
NJM4580V
1/2 VCC
1/2 Vcc-Hi
(SIGNAL GND)
NAVI(AUDIO) ISO
IC2650
NJM4558V
DIN6500
DIN.TCS7741-01WA
(NAVIGATION IN)
DVD ISO
IC2500
NJM4580V
To MAIN P.W.Board (5/6) (TP3001)
IC4000
CXA2069Q
7IN-3OUT
AV SELECTOR
DVD
FRONT LINK
AUX IN1
EXB IN2
AUX3
MAIN OUT
AUX OUT1
EXB OUT2
VIDEO OUT DRIVER
MUTE(REAR-OUT1)
Q2501
XN0F256
D2501
MA152WA
AUX IN1 ISO
IC2550
NJM2060V
JK2521
RCA.JPJ2689-010620
(AUX IN/AUX OUT (AUDIO(L/R)/VIDEO))
(CHASSIS GND)
(V GND)
DVD_VIDEO ISO
Q4051
2SA1774
Q4050
2SC4617
Q4052
2SC4617
MUTE(REAR-OUT2)
Q2502
XN0F256
Q2503
XN0F256
D2502
MA152WA
EXB IN ISO
JK2522
RCA.T6314-AACB
(CAMERA IN)
IC4102
NJM2286V
VIDEO OUT MUTE
Q4101
2SA1037AK
Q4102
2SA1037AK
VIDEO OUT DRIVER
GND

1	AUDIO GND
2	VIDEO GND
3	MONO
4	GUIDE CONT
5	VIDEO
6	REMOUT
7	NAVI RXD
8	R SIGNAL
9	B SIGNAL
10	RGB/ON
11	NAVI TXD
12	C.SYNC
13	G SIGNAL

NOTE:#1:For IVA-D300R(Region number 2)Model Only,
$1:For IVA-D300RB(Region number 2)Model Only,
%1:For IVA-D300E(Region number 3)Model Only,
&1:For IVA-D300E(Region number 4)Model Only,
Others:Common.

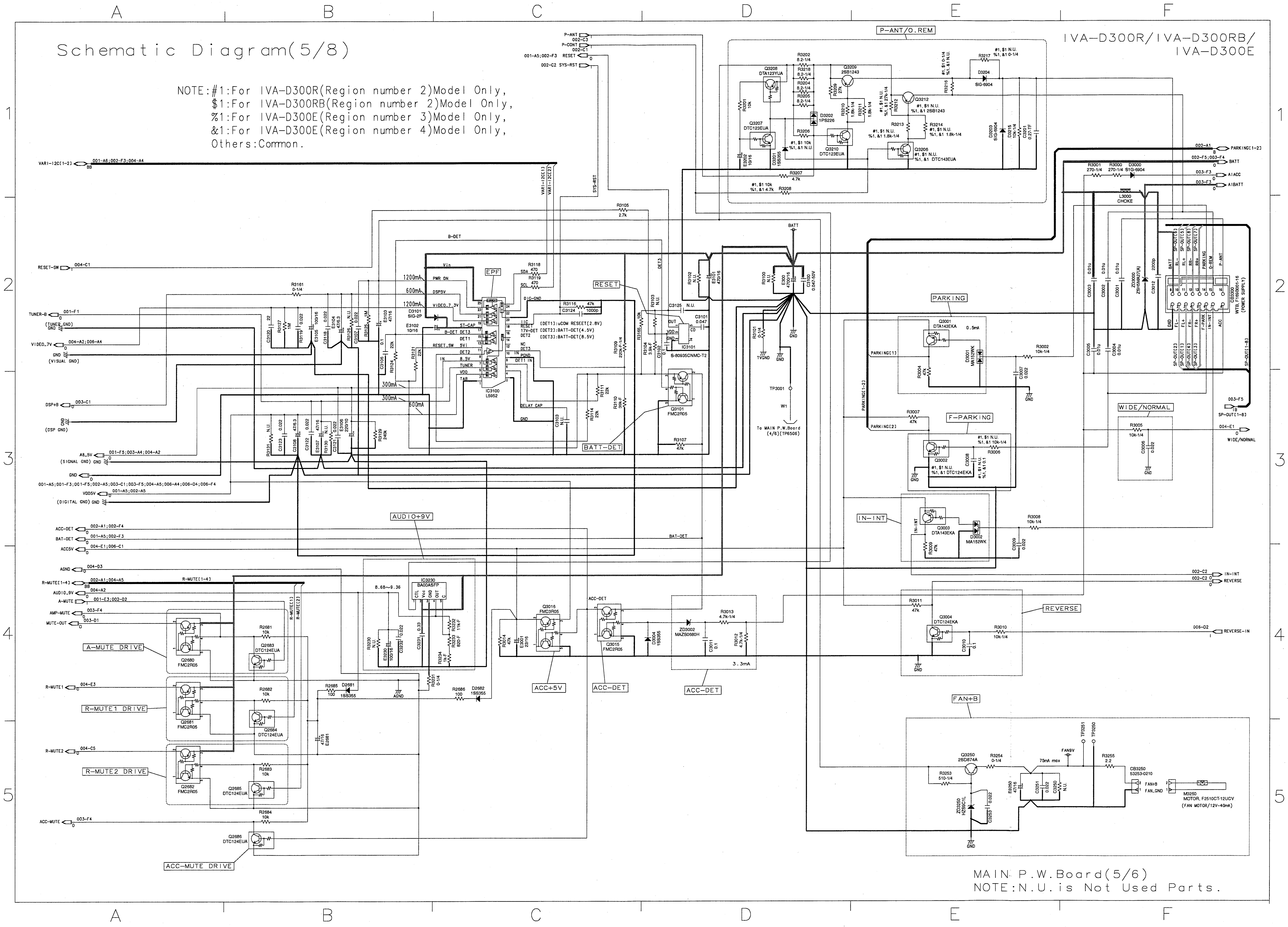
MAIN P.W.Board(4/6)
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(5/8)

IVA–D300R/IVA–D300RB/
IVA–D300E

NOTE:#1:For IVA–D300R(Region number 2)Model Only,
$1:For IVA–D300RB(Region number 2)Model Only,
%1:For IVA–D300E(Region number 3)Model Only,
&1:For IVA–D300E(Region number 4)Model Only,
Others:Common.


A
B
C
D
E
F
1
2
3
4
5
P–ANT/O.REM
EPF
IC3100
L5952
RESET
IC3101
S-80935CNMC-T2
Q3101
FMC2R05
BATT–DET
BATT
PARKING
Q3001
DTA143EKA
D3001
MA152WK
F–PARKING
Q3002
DTC124EKA
WIDE/NORMAL
IN–INT
Q3003
DTA143EKA
D3002
MA152WK
AUDIO+9V
IC3230
BA00ASFP
8.68~9.36
REVERSE
Q3004
DTC124EKA
ACC+5V
Q3016
FMC3R05
ACC–DET
Q3015
FMC2R05
ZD3002
MAZS068OH
3.3mA
FAN+B
Q3250
2SD874A
ZD3250
HZS6C1L
CB3250
53253-0210
M3250
MOTOR, F2510CT-12UCV
(FAN MOTOR/12V-40mA)
L3000
CHOKE
CB3000
WTB. E1693001-16
(POWER SUPPLY)
A–MUTE DRIVE
Q2680
FMC2R05
Q2683
DTC124EUA
R–MUTE1 DRIVE
Q2681
FMC2R05
Q2684
DTC124EUA
R–MUTE2 DRIVE
Q2682
FMC2R05
Q2685
DTC124EUA
ACC–MUTE DRIVE
Q2686
DTC124EUA
Q3208
DTA123YUA
Q3207
DTC123EUA
Q3209
2SB1243
Q3210
DTC123EUA
Q3212
Q3206
D3202
1PS226
D3204
SIG-6904
D3000
SIG-6904
1200mA
600mA
300mA
[DET1]:uCOM RESEET(2.8V)
[DET2]:BATT-DET(4.5V)
[DET3]:BATT-DET(8.5V)
VARI–12C[1-2]
RESET–SW
TUNER–B
(TUNER GND)
VIDEO_7V
(VISUAL GND)
DSP+B
(DSP GND)
A8_5V
(SIGNAL GND)
VDD5V
(DIGITAL GND)
ACC–DET
BAT–DET
ACC5V
AGND
R–MUTE[1-4]
AUDIO_9V
A–MUTE
AMP–MUTE
MUTE–OUT
R–MUTE1
R–MUTE2
ACC–MUTE
P–ANT
P–CONT
RESET
SYS–RST
PARKING[1-2]
BATT
A1ACC
A1BATT
SP–OUT[1-8]
WIDE/NORMAL
IN–INT
REVERSE
REVERSE–IN
TP3001
To MAIN P.W.Board
(4/6)(TP6506)

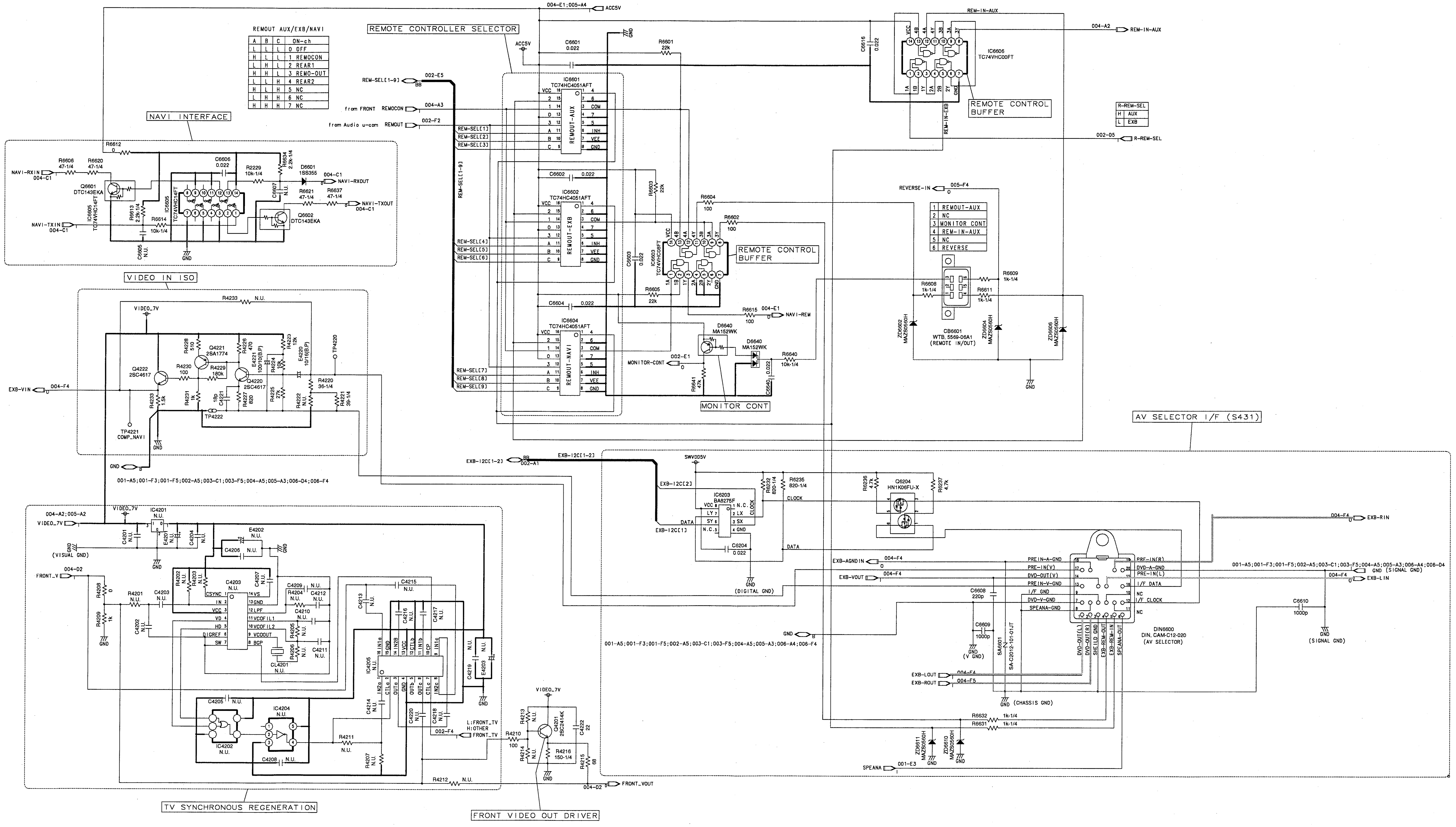
MAIN P.W.Board(5/6)
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD

TO PARTS LIST

TO CONTENTS

Schematic Diagram(6/8)


REMOTE CONTROLLER SELECTOR
NAVI INTERFACE
VIDEO IN ISO
TV SYNCHRONOUS REGENERATION
FRONT VIDEO OUT DRIVER
REMOTE CONTROL BUFFER
MONITOR CONT
AV SELECTOR I/F (S431)
IC6601 TC74HC4051AFT
IC6602 TC74HC4051AFT
IC6604 TC74HC4051AFT
REMOUT-AUX
REMOUT-EXB
REMOUT-NAVI
IC6603 TC74VHC00FT
IC6605 TC74VHC14FT
IC6606 TC74VHC00FT
IC6203 BA8275F
Q6204 HN1K06FU-X
Q6601 DTC143EKA
Q6602 DTC143EKA
D6601 1SS355
D6640 MA152WK
Q4220 2SC4617
Q4221 2SA1774
Q4222 2SC4617
Q4201 2SC2414K
IC4201 N.U.
IC4202 N.U.
IC4203 N.U.
IC4204 N.U.
IC4205 N.U.
CB6601 WTB, 5569-06A1 (REMOTE IN/OUT)
DIN6600 DIN, CAM-C12-020 (AV SELECTOR)
SA6601 SA-C2012-101-01UT
ZD6602 MAZS056GH
ZD6604 MAZS056GH
ZD6606 MAZS056GH
ZD6610 MAZS056GH
ZD6611 MAZS056GH
ACC5V
SWVDD5V
VIDEO_7V
REM-SEL[1-9]
REM-IN-AUX
R-REM-SEL
REVERSE-IN
NAVI-RXIN
NAVI-TXIN
NAVI-RXOUT
NAVI-TXOUT
NAVI-REM
MONITOR-CONT
from FRONT REMOCON
from Audio u-com REMOUT
EXB-VIN
EXB-I2C[1-2]
EXB-AGNDIN
EXB-VOUT
EXB-RIN
EXB-LIN
EXB-LOUT
EXB-ROUT
SPEANA
FRONT_V
FRONT_TV
FRONT_VOUT
L:FRONT_TV H:OTHER
GND
(VISUAL GND)
(DIGITAL GND)
(SIGNAL GND)
(CHASSIS GND)
(V GND)
TP4220
TP4221 COMP_NAVI
TP4222
001-A5;001-F3;001-F5;002-A5;003-C1;003-F5;004-A5;005-A3;006-D4;006-F4
CLOCK
DATA
PRE-IN-A-GND
PRE-IN(V)
DVD-OUT(V)
PRE-IN-V-GND
I/F GND
DVD-V-GND
SPEANA-GND
PRE-IN(R)
DVD-A-GND
PRE-IN(L)
I/F DATA
I/F CLOCK
NC

REMOUT AUX/EXB/NAVI

A	B	C	ON-ch
L	L	L	0 OFF
H	L	L	1 REMOCON
L	H	L	2 REAR1
H	H	L	3 REMO-OUT
L	L	H	4 REAR2
H	L	H	5 NC
L	H	H	6 NC
H	H	H	7 NC

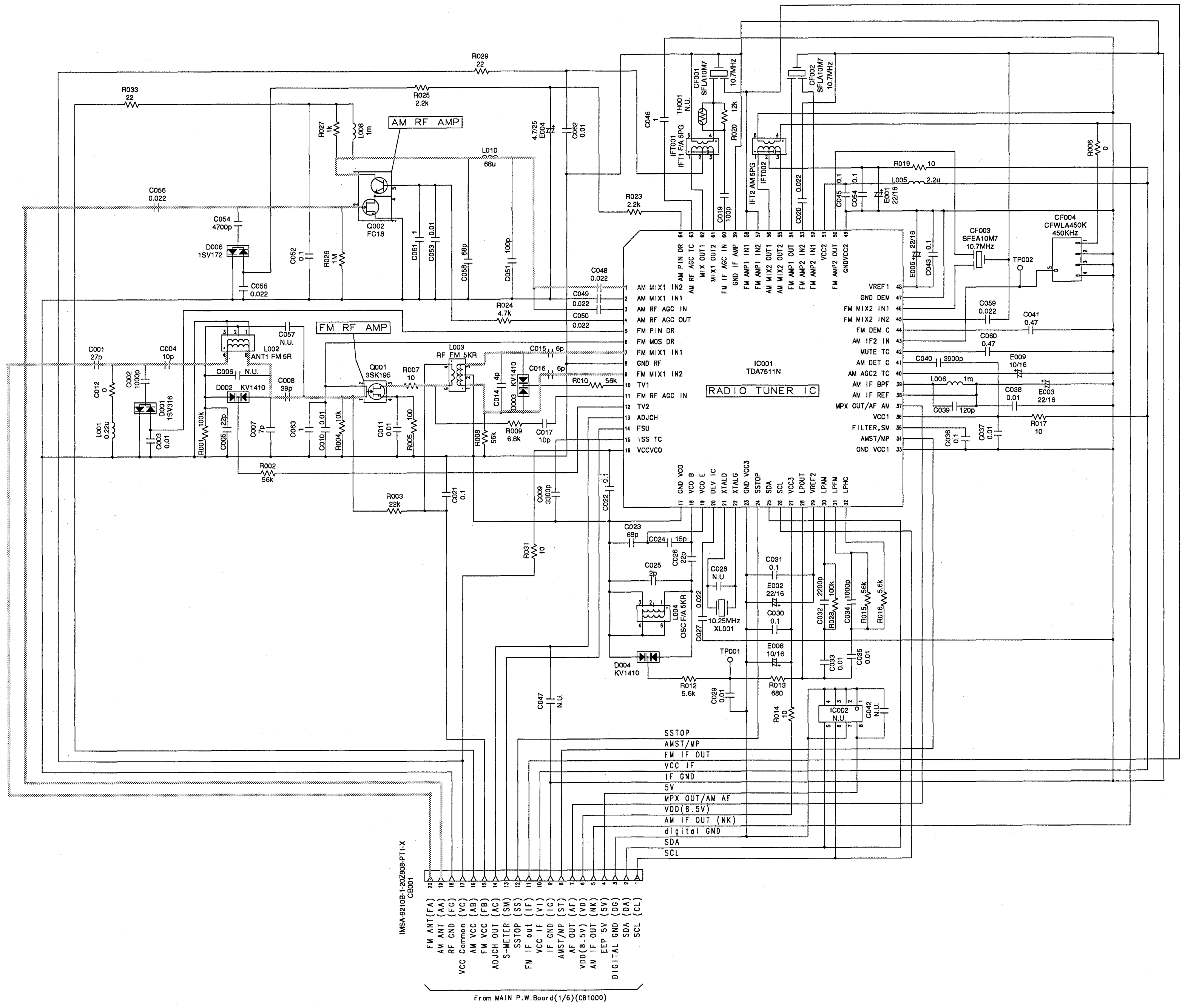
R-REM-SEL	
H	AUX
L	EXB

1	REMOUT-AUX
2	NC
3	MONITOR CONT
4	REM-IN-AUX
5	NC
6	REVERSE

MAIN P.W.Board(6/6)
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Schematic Diagram(7/8)
(IVA-D300R/IVA-D300RB Model Only)


AM RF AMP
FM RF AMP
RADIO TUNER IC
IC001
TDA7511N
Q001
3SK195
Q002
FC18
D001
1SV316
D002
KV1410
D003
KV1410
D004
KV1410
D006
1SV172
L002
ANT1 FM 5R
L003
RF FM 5KR
L004
OSC F/A 5KR
IFT001
IFT1 F/A 5PG
IFT002
IFT2 AM 5PG
CF001
SFJA10M7
10.7MHz
CF002
SFJA10M7
10.7MHz
CF003
SFEA10M7
10.7MHz
CF004
CFWLA450K
450KHz
XL001
10.25MHz
TH001
N.U.
IC002
N.U.
TP001
TP002
R029
22
R033
22
R025
2.2k
R027
R023
2.2k
R024
4.7k
R019
10
L005
2.2u
L010
68u
R010
56k
R002
56k
R003
22k
R031
10
R012
5.6k
R013
680
R014
10
R017
10
C001
27p
C004
10p
C056
0.022
C054
4700p
C055
0.022
C048
0.022
C049
0.022
C050
0.022
C023
68p
C024
15p
C026
22p
C025
2p
C028
N.U.
C031
0.1
E002
22/16
C030
0.1
E008
10/16
C029
0.01
C047
N.U.
C040
3900p
C039
120p
C059
0.022
C041
0.47
C060
0.47
E009
10/16
E003
22/16
C038
0.01
L006
1m
1 AM MIX1 IN2
2 AM MIX1 IN1
3 AM RF AGC IN
4 AM RF AGC OUT
5 FM PIN DR
6 FM MOS DR
7 FM MIX1 IN1
8 GND RF
9 FM MIX1 IN2
10 TV1
11 FM RF AGC IN
12 TV2
13 ADJCH
14 FSU
15 ISS TC
16 VCCVCO
17 GND VCO
18 VCO B
19 VCO E
20 DEV TC
21 XTALD
22 XTALG
23 GND VCC3
24 SSTOP
25 SDA
26 SCL
27 VCC3
28 LPOUT
29 VREF2
30 LPAM
31 LPFM
32 LPHC
33 GND VCC1
34 AMST/MP
35 FILTER,SM
36 VCC1
37 MPX OUT/AF AM
38 AM IF REF
39 AM IF BPF
40 AM AGC2 TC
41 AM DET C
42 MUTE TC
43 AM IF2 IN
44 FM DEM C
45 FM MIX2 IN2
46 FM MIX2 IN1
47 GND DEM
48 VREF1
49 GNDVCC2
50 FM AMP2 OUT
51 VCC2
52 FM AMP2 IN1
53 FM AMP2 IN2
54 FM AMP1 OUT
55 AM MIX2 OUT2
56 AM MIX2 OUT1
57 FM AMP1 IN2
58 FM AMP1 IN1
59 GND IF AMP
60 FM IF AGC IN
61 MIX1 OUT2
62 MIX OUT1
63 AM RF AGC TC
64 AM PIN DR
SSTOP
AMST/MP
FM IF OUT
VCC IF
IF GND
5V
MPX OUT/AM AF
VDD(8.5V)
AM IF OUT (NK)
digital GND
SDA
SCL
IMSA-9210B-1-20Z808-PT1-X
CB001
20 FM ANT(FA)
19 AM ANT (AA)
18 RF GND (FG)
17 VCC Common (VC)
16 AM VCC (AB)
15 FM VCC (FB)
14 ADJCH OUT (AC)
13 S-METER (SM)
12 SSTOP (SS)
11 FM IF out (IF)
10 VCC IF (VI)
9 IF GND (IG)
8 AMST/MP (ST)
7 AF OUT (AF)
6 VDD(8.5V) (VD)
5 AM IF OUT (NK)
4 EEP 5V (5V)
3 DIGITAL GND (DG)
2 SDA (DA)
1 SCL (CL)
From MAIN P.W.Board(1/6)(CB1000)

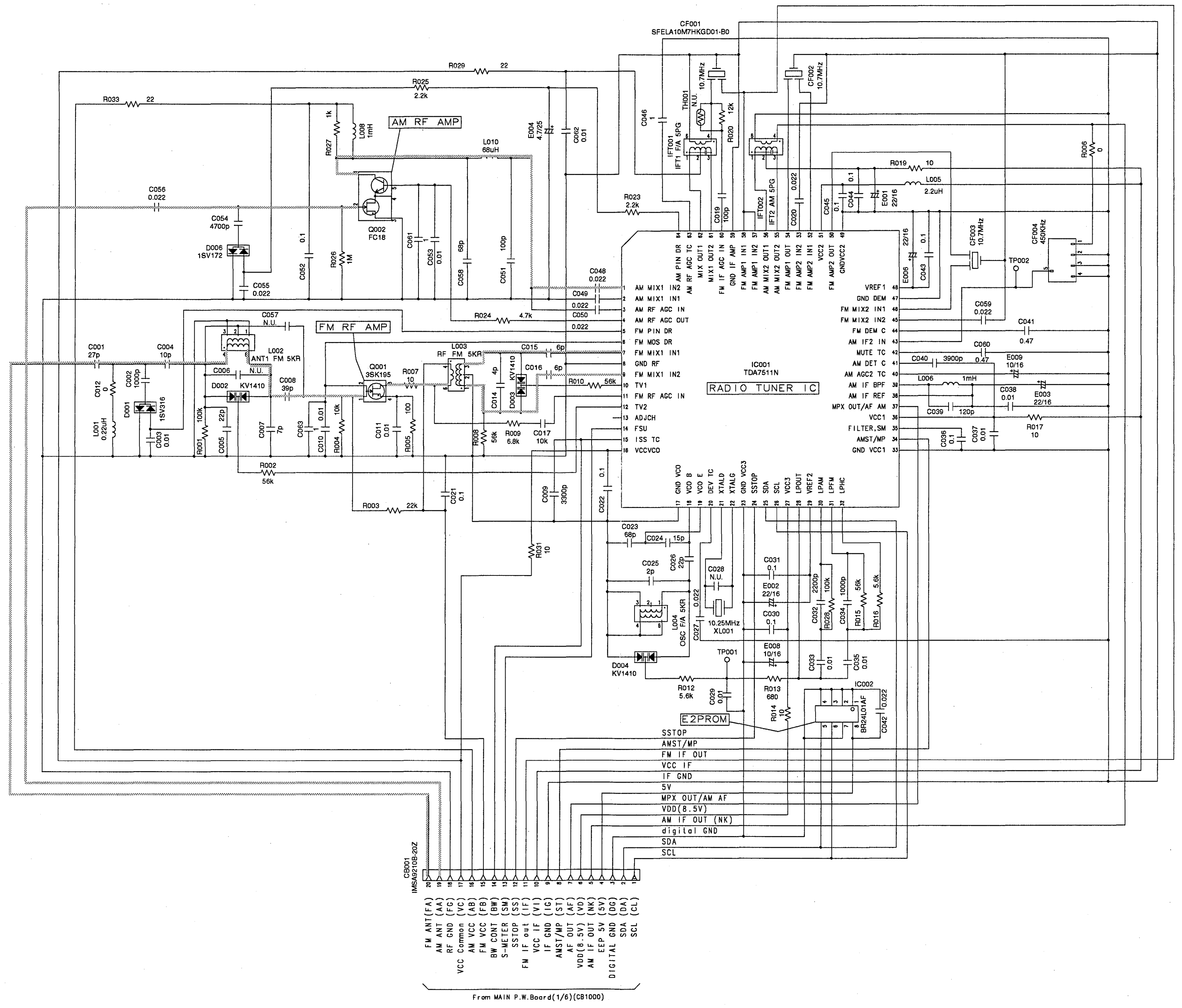
RADIO P.W.Board

NOTE:N.U. is Not Used Parts.

TO P. W. BOARD TO PARTS LIST TO CONTENTS

Schematic Diagram(8/8)
(IVA-D300E Model Only)

IVA-D300R/IVA-D300RB/
IVA-D300E


AM RF AMP
FM RF AMP
RADIO TUNER IC
IC001
TDA7511N
CF001
SFELA10M7HKGD01-B0
Q001
3SK195
Q002
FC18
IC002
BR24L01AF
E2PROM
XL001
10.25MHz
TP001
TP002
CB001
IMSA9210B-20Z
SSTOP
AMST/MP
FM IF OUT
VCC IF
IF GND
5V
MPX OUT/AM AF
VDD(8.5V)
AM IF OUT (NK)
digital GND
SDA
SCL
FM ANT(FA)
AM ANT (AA)
RF GND (FG)
VCC Common (VC)
AM VCC (AB)
FM VCC (FB)
BW CONT (BW)
S-METER (SM)
SSTOP (SS)
FM IF out (IF)
VCC IF (VI)
IF GND (IG)
AMST/MP (ST)
AF OUT (AF)
VDD(8.5V) (VD)
AM IF OUT (NK)
EEP 5V (5V)
DIGITAL GND (DG)
SDA (DA)
SCL (CL)
From MAIN P.W.Board(1/6)(CB1000)

RADIO P.W.Board
NOTE:N.U.is Not Used Parts.

TO P. W. BOARD
TO PARTS LIST
TO CONTENTS

Terminal Voltage of IC/TR

<MAIN P.W.Board>

IC1001		
1	4.2/4.9	FM Standard input/AM Standard input
2	4.2/4.9	FM Standard input/AM Standard input
3	4.2/4.9	FM Standard input/AM Standard input
4	0	
5	4.2/4.9	FM Standard input/AM Standard input
6	4.2/4.9	FM Standard input/AM Standard input
7	4.2/4.9	FM Standard input/AM Standard input
8	8.2	

IC1002 (Only IVA-D300R/IVA-D300RB)		
1	0	FM Standard input
2	3.11	FM Standard input
3	3.12	FM Standard input
4	8.22	FM Standard input
5	8.21	FM Standard input

IC1003 (Only IVA-D300R/IVA-D300RB)					
1	0	FM Standard input	11	0	FM Standard input
2	0	FM Standard input	12	0	FM Standard input
3	0	FM Standard input	13	2.26	FM Standard input
4	2.32	FM Standard input	14	4.81	FM Standard input
5	2.21	FM Standard input	15	0	FM Standard input
6	0	FM Standard input	16	2.26	FM Standard input
7	4.62	FM Standard input	17	2.42	FM Standard input
8	4.63	FM Standard input	18	2.44	FM Standard input
9	4.84	FM Standard input	19	2.41	FM Standard input
10	4.84	FM Standard input	20	2.41	FM Standard input

IC1004-1 (Only IVA-D300R/IVA-D300RB)					
1	0/0	*1	21	0	FM Standard input
2	0	FM Standard input	22	0	FM Standard input
3	0	FM Standard input	23	4.78	FM Standard input
4	0/0	*1	24	4.84	FM Standard input
5	4.96	FM Standard input	25	4/5	*1
6	0	FM Standard input	26	0/0	*1
7	0	FM Standard input	27	0.2/0.2	*1
8	0	FM Standard input	28	4.2/4.2	*1
9	4.93	FM Standard input	29	0.2/4.6	*1
10	2.65	FM Standard input	30	3/3	*1
11	2.64	FM Standard input	31	0	FM Standard input
12	0	FM Standard input	32	0	FM Standard input
13	4.76	FM Standard input	33	0	FM Standard input
14	0	FM Standard input	34	0	FM Standard input
15	4.91	FM Standard input	35	0	FM Standard input
16	4.93	FM Standard input	36	4.75	FM Standard input
17	4.83	FM Standard input	37	4.64	FM Standard input
18	0	FM Standard input	38	4.77	FM Standard input
19	4.93	FM Standard input	39	4.78	FM Standard input
20	0	FM Standard input	40	4.75	FM Standard input

NOTE : *1 : FM Standard input/AM Standard input

TO SCHEMATIC TO CONTENTS

IC1004-2 (Only IVA-D300R/IVA-D300RB)					
41	4.77	FM Standard input	71	0	FM Standard input
42	0	FM Standard input	72	0	FM Standard input
43	0	FM Standard input	73	0	FM Standard input
44	0	FM Standard input	74	0	FM Standard input
45	0	FM Standard input	75	0	FM Standard input
46	0	FM Standard input	76	0	FM Standard input
47	0	FM Standard input	77	0	FM Standard input
48	4.77	FM Standard input	78	0	FM Standard input
49	0	FM Standard input	79	0	FM Standard input
50	0	FM Standard input	80	0	FM Standard input
51	0	FM Standard input	81	4.95	FM Standard input
52	0	FM Standard input	82	0	FM Standard input
53	4.92	FM Standard input	83	0	FM Standard input
54	4.91	FM Standard input	84	0	FM Standard input
55	0	FM Standard input	85	0	FM Standard input
56	0	FM Standard input	86	0	FM Standard input
57	0	FM Standard input	87	0	FM Standard input
58	0	FM Standard input	88	0	FM Standard input
59	0	FM Standard input	89	0	FM Standard input
60	0	FM Standard input	90	0	FM Standard input
61	0	FM Standard input	91	0	FM Standard input
62	0	FM Standard input	92	4.8/0	*1
63	0	FM Standard input	93	4.8/0	*1
64	0	FM Standard input	94	0	FM Standard input
65	0	FM Standard input	95	4.8/0	*1
66	0	FM Standard input	96	4.8/0	*1
67	0.2	FM Standard input	97	4.96	FM Standard input
68	0	FM Standard input	98	4.97	FM Standard input
69	0	FM Standard input	99	0	FM Standard input
70	0	FM Standard input	100	0.2/8.3	*1

NOTE : *1 : FM Standard input/AM Standard input

IC2000							
1	4.2	12	4.2	23	4.2	34	4.2
2	4.2	13	4.2	24	4.2	35	4.2
3	4.2	14	4.2/4.9(*1)	25	4.2	36	4.2
4	4.2	15	0	26	4.2	37	4.2
5	4.2	16	4.3	27	4.2	38	4.2
6	4.2	17	0.2	28	4.2	39	4.2
7	4.2	18	3.6	29	4.2	40	4.2
8	4.2	19	0	30	4.2	41	4.2
9	4.2	20	PS	31	4.2	42	4.2
10	4.2	21	PS	32	4.2	43	4.2
11	4.2	22	8.4	33	4.2	44	4.2

NOTE : *1 : FM Standard input/AM Standard input

IC2001	
1	4.2
2	0
3	4.2
4	8.4
5	4.2

TO SCHEMATIC   TO CONTENTS

IC2030							
1	0	15	2.5	29	0	43	0
2	4.9	16	0	30	2.5	44	0
3	AC	17	2.5	31	0	45	0
4	AC	18	0	32	2.5	46	0
5	0	19	0	33	2.5	47	0
6	0	20	2.5	34	0	48	PS
7	0	21	2.5	35	0	49	4.9
8	2.5	22	0	36	0	50	4.8
9	2.5	23	2.4	37	4.9	51	0
10	0	24	0	38	0	52	0
11	2.5	25	2.5	39	0	53	PS
12	0	26	2.5	40	PS	54	PS
13	4.9	27	2.5	41	PS	55	0
14	2.5	28	2.5	42	0	56	0

IC2050			
1	4.2	8	4.2
2	4.2	9	4.2
3	4.2	10	4.2
4	8.4	11	0
5	4.2	12	4.2
6	4.2	13	4.2
7	4.2	14	4.2

IC2100	
1	4.2
2	4.2
3	4.2
4	0
5	4.2
6	4.2
7	4.2
8	8.4

IC2101	
1	4.2
2	4.2
3	4.2
4	0
5	4.2
6	4.2
7	4.2
8	8.4

IC2203	
1	4.2
2	4.2
3	4.2
4	0
5	4.2
6	4.2
7	4.2
8	8.4

IC2204			
1	4.2	8	4.2
2	4.2	9	4.2
3	4.2	10	4.2
4	8.4	11	0
5	4.2	12	4.2
6	4.2	13	4.2
7	4.2	14	4.2

IC2300					
1	4.2		8	4.2	
2	4.2		9	4.2	
3	4.2		10	4.2	
4	4.2		11	4.2	
5	8.4/0	LPF ON/OFF	12	0/8.4	LPF ON/OFF
6	8.4/0	LPF ON/OFF	13	0/8.4	LPF ON/OFF
7	0		14	8.4	

IC2301			
1	4.2	8	4.2
2	4.2	9	4.2
3	4.2	10	4.2
4	8.4	11	0
5	4.2	12	4.2
6	4.2	13	4.2
7	4.2	14	4.2

TO SCHEMATIC TO CONTENTS

IC2302					
1	4.2		8	4.2	
2	4.2		9	4.2	
3	4.2		10	4.2	
4	4.2		11	4.2	
5	0/8.4	Ai NORM/EQ	12	8.4/0	Ai NORM/EQ
6	0/8.4	Ai NORM/EQ	13	8.4/0	Ai NORM/EQ
7	0		14	8.4	

IC2303					
1	4.2		8	4.2	
2	4.2		9	4.2	
3	4.2		10	4.2	
4	4.2		11	4.2	
5	0/8.4	Ai NORM/EQ	12	8.4/0	Ai NORM/EQ
6	0/8.4	Ai NORM/EQ	13	8.4/0	Ai NORM/EQ
7	0		14	8.4	

IC2400			
1	0	14	1.44
2	0	15	1.44
3	7.5	16	1.38
4	4.9	17	7.6
5	7.5	18	0
6	14.3	19	7.6
7	7.6	20	14.3
8	0	21	7.6
9	7.6	22	4.1
10	8.8	23	7.6
11	1.45	24	0
12	1.45	25	0.3
13	0		

IC2500	
1	4.4
2	4.4
3	4.4
4	0
5	4.4
6	4.4
7	4.4
8	8.4

IC2550			
1	4.4	8	4.4
2	4.4	9	4.4
3	4.4	10	4.4
4	8.4	11	0
5	4.4	12	4.4
6	4.4	13	4.4
7	4.4	14	4.4

IC2600	
1	4.4
2	4.4
3	4.4
4	0
5	4.4
6	4.4
7	4.4
8	8.4

IC2650	
1	4.2
2	4.2
3	4.2
4	0
5	4.2
6	4.2
7	4.2
8	8.4

TO SCHEMATIC

TO CONTENTS

IC3100

1	0		14	NC	
2	0		15	NC	
3	5		16	NC	
4	4.3		17	13.4	
5	8.2/0	TUNER/Others	18	NC	
6	4.9		19	7.2	
7	8.5/0	PWR ON/OFF	20	0	
8	0		21	5/0	PWR ON/OFF
9	5		22	PS	
10	2.1		23	14.2/0	PWR ON/OFF
11	5		24	PS	
12	NC		25	14.4	
13	NC				

IC3101

1	4.9
2	4.9
3	0
4	NC
5	0

IC3230

1	4.3/0	PWR ON/OFF
2	14.3	
3	0	
4	9/0	PWR ON/OFF
5	1.22/0	PWR ON/OFF

IC4000

1	4.3	12	4.5	23	4.5	34	5
2	4.5	13	0.2	24	4	35	0
3	4	14	5	25	4.5	36	4.5
4	4.5	15	4	26	4.5	37	4.5
5	4.5	16	4.5	27	0.2	38	4.5
6	0.2	17	4	28	5	39	3.8
7	5	18	4.5	29	4.5	40	4.5
8	4	19	4.5	30	4	41	3.8
9	4.5	20	0.2	31	4.5	42	9
10	4	21	5	32	0	43	4.5
11	4.5	22	4	33	5	44	3.7

IC4102

1	2.2	9	2.2
2	0	10	0
3	1.5	11	2.2
4	0	12	4.8
5	2.2	13	7.3
6	1.5	14	3
7	4.8	15	0
8	2.2	16	2.2

TO SCHEMATIC TO CONTENTS

IC5001-1					
1	4.2/4.9	FM Standard input/AM Standard input	55	NC	
2	4.9		56	NC	
3	0		57	NC	
4	4.2	AM Standard input	58	NC	
5	0		59	NC	
6	NC		60	5	
7	NC		61	NC	
8	NC		62	NC	
9	NC		63	NC	
10	NC		64	NC	
11	NC		65	0	
12	NC		66	NC	
13	NC		67	NC	Only IVA-D300E
14	NC			PS	Only IVA-D300R/IVA-D300RB
15	5/0	R-REM-SEL AUX/EXB	68	NC	Only IVA-D300E
16	0/0/0/0/5	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB		PS	Only IVA-D300R/IVA-D300RB
17	0/0/5/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB	69	NC	
18	0/5/0/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB	70	NC	
19	0/0/0/0/5	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB	71	0	
20	0/0/5/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB	72	0	
21	0/5/0/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB	73	AC	
22	5		74	AC	
23	0/0/0/0/5	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB	75	0	
24	0/0/5/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB	76	PS	at AMP-LINK
25	0/5/0/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB	77	4.8	
26	NC		78	5/0	R-VMUTE OFF/ON
27	NC		79	5/0	R-VMUTE OFF/ON
28	0		80	5/0	R-AMUTE OFF/ON
29	NC		81	5/0	R-AMUTE OFF/ON
30	0		82	5/0	ACC ON/OFF
31	5/0		83	0	
32	NC		84	PS	at EXB Communication
33	PS	Only IVA-D300E	85	5	
	NC	Only IVA-D300R/IVA-D300RB	86	PS	at EXB Communication
34	PS	Only IVA-D300E	87	5	
	NC	Only IVA-D300R/IVA-D300RB	88	5	
35	NC		89	5	
36	NC		90	5	
37	0		91	5	
38	3.2		92	0	
39	5		93	5	
40	4.9		94	PS	
41	0		95	0	
42	PS		96	PS	
43	NC		97	PS	
44	PS		98	PS	at AMP-LINK
45	5		99	PS	at AMP-LINK
46	NC		100	0/5	LPF ON/OFF
47	NC		101	5/0	LPF ON/OFF
48	NC		102	5	
49	NC		103	5/0	MUTE ON/OFF
50	NC		104	0	
51	NC		105	0	
52	NC		106	5	
53	NC		107	PS	
54	NC		108	PS	

TO SCHEMATIC TO CONTENTS

IC5001-1					
109	NC	Only IVA-D300E	126	NC	
	PS	Only IVA-D300R/IVA-D300RB	127	NC	
110	NC	Only IVA-D300E	128	5	
	PS	Only IVA-D300R/IVA-D300RB	129	NC	
111	5		130	NC	
112	NC		131	0	
113	NC	Only IVA-D300E	132	PS	
	PS	Only IVA-D300R/IVA-D300RB	133	PS	
114	0/5	IN-INT OFF/ON	134	NC	
115	5/0	REVERSE OFF/ON	135	5	Only IVA-D300E
116	PS			0	Only IVA-D300R/IVA-D300RB
117	PS		136	5	
118	PS		137	NC	
119	PS		138	NC	
120	0		139	NC	
121	5/0	RADIO/Others	140	NC	
122	5/0	H-PARK ON/OFF	141	NC	
123	5		142	0	
124	5		143	5	
125	NC		144	0	

IC5002	
1	0
2	0
3	0
4	0
5	PS
6	PS
7	0
8	5

IC6000					
1	4.9		9	4.9	
2	0		10	0	
3	PS	at CHG	11	4.9	
4	PS	at CHG	12	PS(1.93)	at CHG
5	AC		13	PS(2.97)	at CHG
6	AC		14	0	
7	4.9		15	4.9	
8	0		16	4.9	

IC6001	
1	0
2	0
3	0
4	0
5	2.53
6	2.53
7	4.94
8	4.93

IC6002	
1	0
2	0
3	0
4	0
5	2.53
6	2.53
7	4.94
8	4.93

IC6100			
1	0	8	4.95
2	4.87	9	0
3	0	10	4.92
4	4.92	11	0
5	4.94	12	0
6	0	13	4.94
7	0	14	4.94

IC6200		
1	5	at connect AMP LINK
2	PS	at connect AMP LINK
3	0	at connect AMP LINK
4	PS	at connect AMP LINK
5	5	at connect AMP LINK

IC6202		
1	PS	at connect AMP LINK
2	PS	at connect AMP LINK
3	PS	at connect AMP LINK
4	0	at connect AMP LINK
5	PS	at connect AMP LINK
6	1.9	at connect AMP LINK
7	PS	at connect AMP LINK
8	5	at connect AMP LINK

TO SCHEMATIC TO CONTENTS

IC6203		
1	0	at connect VPE-S431
2	PS	at connect VPE-S431
3	PS	at connect VPE-S431
4	0	at connect VPE-S431
5	0	at connect VPE-S431
6	PS	at connect VPE-S431
7	PS	at connect VPE-S431
8	5	at connect VPE-S431

IC6300	
1	0
2	PS
3	PS
4	0
5	0
6	PS
7	PS
8	5

IC6601		
1	0/PS	usually/at REM Communication
2	0	
3	5/PS	usually/at REM Communication
4	0	
5	0	
6	0	
7	0	
8	0	
9	0/0/0/0/5	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
10	0/0/5/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
11	0/5/0/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
12	0/PS	usually/at REM Communication
13	5/PS	usually/at REM Communication
14	5/PS	usually/at REM Communication
15	0/PS	usually/at REM Communication
16	5	

IC6602		
1	0/PS	usually/at REM Communication
2	0	
3	5/PS	usually/at REM Communication
4	0	
5	0	
6	0	
7	0	
8	0	
9	0/0/0/0/5	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
10	0/0/5/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
11	0/5/0/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
12	0/PS	usually/at REM Communication
13	5/PS	usually/at REM Communication
14	5/PS	usually/at REM Communication
15	0/PS	usually/at REM Communication
16	5	

TO SCHEMATIC TO CONTENTS

IC6603		
1	5/PS	usually/at REM Communication
2	5/PS	usually/at REM Communication
3	5/PS	usually/at REM Communication
4	0	
5	0	
6	NC	
7	0	
8	5/PS	usually/at REM Communication
9	5/PS	usually/at REM Communication
10	5/PS	usually/at REM Communication
11	5/PS	usually/at REM Communication
12	5/PS	usually/at REM Communication
13	5/PS	usually/at REM Communication
14	5/PS	

IC6604		
1	0/PS	usually/at REM Communication
2	0	
3	5/PS	usually/at REM Communication
4	0	
5	0	
6	0	
7	0	
8	0	
9	0/0/0/0/5	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
10	0/0/5/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
11	0/5/0/5/0	REMOUT-AUX OFF/REM/R1/REM-OUT/EXB
12	0/PS	usually/at REM Communication
13	5/PS	usually/at REM Communication
14	5/PS	usually/at REM Communication
15	0/PS	usually/at REM Communication
16	5	

IC6605					
1	5/PS	usually/at NAVI Communication	8	NC	
2	5/PS	usually/at NAVI Communication	9	0	
3	0		10	NC	
4	NC		11	0	
5	0		12	5/PS	usually/at NAVI Communication
6	NC		13	5/PS	usually/at NAVI Communication
7	0		14	5	

IC6606					
1	5/0	R-REM-SEL AUX/EXB	8	0/PS	usually/at REM Communication
2	5/0	R-REM-SEL AUX/EXB	9	5/PS	usually/at REM Communication
3	0/5	R-REM-SEL AUX/EXB	10	5/PS	usually/at REM Communication
4	0/5	R-REM-SEL AUX/EXB	11	5/PS	usually/at REM Communication
5	0/PS	usually/at REM Communication	12	0/PS	usually/at REM Communication
6	5/PS	usually/at REM Communication	13	5/0	R-REM-SEL AUX/EXB
7	0		14	5	

TO SCHEMATIC

TO CONTENTS

IC6607		
1	5	at connect AMP LINK
2	PS	at connect AMP LINK
3	0	at connect AMP LINK
4	PS	at connect AMP LINK
5	5	at connect AMP LINK

	B	C	E	NOTE
Q1001	0/5	0	0	FM Standard input/AM Standard input (Only IVA-D300E)
Q1002	0	3.7	0	FM Standard input (Only IVA-D300R/IVA-D300RB)
Q1003	8.2/8.2	8.2/7.5	0/8.2	FM/AM
Q1004	8.2/8.2	0/8.2	8.2/0	FM/AM
Q1005	0.1/8.2	8.2/1.8	8.3/8.3	FM/AM
Q1006	4.8/0	0.1/8.3	0/0	FM/AM (Only IVA-D300E)
Q1008	0	8.23	0	FM Standard input (Only IVA-D300R/IVA-D300RB)
Q2002	8.5/0	0/AC	0/0	A MUTE ON/OFF
Q2004	6/0	0/4.5	0/0	A MUTE ON/OFF
Q2400	3.2/0	0/4.1	0/0	RESET ON/OFF
Q2401	4.5/0	0/4.1	0/0	A MUTE ON/OFF
Q2683	0/4.5	4.5/0	0/0	A MUTE ON/OFF
Q2684	4.8	0	0	REAR OUT1 DVD
Q2685	4.8	0	0	EXPANSION BOX ON(REAR1 DVD)
Q2686	5	0	0	
Q3001	3.3/5	5/0	5/5	PARKING ON/OFF
Q3003	3.3/5	5/0	5/5	IN-INT ON/OFF
Q3004	4.2/0	0/5	0/0	REVERSE ON/OFF
Q3206	2.5	0.1	0	RADIO Mode
Q3207	0	14.4	0	RADIO Mode
Q3208	14.4	0	14.4	RADIO Mode
Q3209	14.3	14.3	13.7	RADIO Mode
Q3210	2.8	0.1	0	RADIO Mode
Q3212	14.3	14.3	13.7	RADIO Mode
Q3250	9.6	14.4	9.4	
Q4001	3.8	7.3	3.2	
Q4002	3.8	7.3	3.2	
Q4003	3.8	7.3	3.2	
Q4050	3.8	5.5	3.2	
Q4051	5.5	2.3	6.1	
Q4052	2.3	7.3	1.7	
Q4101	1.5	0	2.2	
Q4102	1.5	0	2.2	
Q4201	3.2	7.3	2.5	
Q4220	3.8	5.5	3.2	at connect VPE-S431
Q4221	5.5	2.3	6.2	at connect VPE-S431
Q4222	2.3	7.3	1.7	at connect VPE-S431
Q5001	4.5	0.1	0	
Q5002	4.3	5	5	
Q6000	5	2	5	
Q6401	2.7/0	0/4.9	0/0	RESET SW ON/OFF
Q6601	PS	PS	0	at operating Touch Panel by connect NAVI
Q6602	PS	PS	0	at operating Touch Panel by connect NAVI
Q6640	3.3/5	5/0	5/5	MONITOR CONT ON/OFF

TO SCHEMATIC
TO CONTENTS

	1	2	3	4	5	NOTE
Q1007	0.1	5	5	8.2	0	FM Standard input (Only IVA-D300R/IVA-D300RB)
Q2003	0/8.5	8.5/0	8.5/8.5	6/0	0/0	A MUTE ON/OFF
Q2300	0/8.5	8.4/0	0/4.8	0/0	4.8/0	LPF ON/OFF
Q2680	0/14.4	14.4/0	0/0	4.5/0	0/0	A MUTE ON/OFF
Q2681	14.4	0	0	0	0	REAR OUT1 DVD
Q2682	14.4	0	0	0	0	EXPANSION BOX ON(REAR1 DVD)
Q3015	0/5	4.9/0	5/5	6.3/0	0/0	ACC ON/OFF
Q3016	0/5	4.9/0	5/5	5/0	0/0	ACC ON/OFF
Q3101	0	5	5	2.8	0	
Q6405	0/4.9	5/0	5/5	4.7/0	0/0	ACC ON/OFF

	1	2	3	4	5	6	NOTE
Q2101	O/AC	0/0	O/AC	6.5/0	0/0	6.5/0	A MUTE ON/OFF
Q2102	O/AC	0/0	O/AC	6.5/0	0/0	6.5/0	A MUTE ON/OFF
Q2103	O/AC	0/0	O/AC	6.5/0	0/0	6.5/0	A MUTE ON/OFF
Q2501	AC	0	AC	0	0	0	REAR OUT1 DVD
Q2502	AC	0	AC	0	0	0	EXPANSION BOX ON(REAR1 DVD)
Q2503	AC	0	AC	0	0	0	EXPANSION BOX ON(REAR1 DVD)
Q6204	PS	5	PS	PS	5	PS	at connect VPE-S431
Q6301	PS	5	PS	PS	5	PS	

[Measuring Conditions]
1.Power Supply Voltage : DC14.4V
2.Measuring Meter : Digital Multi Meter
3.Measuring Point Reference : Between GND
4.Measuring Condition : at playing DVD (at No Mode assignation)

TO SCHEMATIC

TO CONTENTS

<RADIO P.W.Board>

IC001							
1	0	17	1.43	33	0	49	0
2	0	18	3.57	34	0.25	50	3.88
3	0	19	3.57	35	3.81	51	7.8
4	0	20	3.26	36	8.01	52	1.99
5	0	21	2	37	3.13	53	1.99
6	7.73	22	1.97	38	0.43	54	3.92
7	1.55	23	0	39	0.43	55	8.08
8	0	24	2.52	40	0.48	56	8.08
9	1.26	25	4.95	41	2.35	57	1.99
10	8.04	26	0.85	42	2.92	58	1.99
11	0.81	27	8.11	43	0.43	59	0
12	8.04	28	8.07	44	2.8	60	3.71
13	3.73	29	2.6	45	4.37	61	8.03
14	4.94	30	2.58	46	4.37	62	1.06
15	4.96	31	0	47	0	63	8.03
16	8.09	32	0	48	5.12	64	0.63

IC002			
1	0	5	PS
2	0	6	PS
3	0	7	0
4	0	8	5

Q001	
1	2.49
2	7.75
3	7.82
4	1.09

Q002	
1	0
2	0
3	0
4	0
5	0.53

[Measuring Conditions]
1.Power Supply Voltage : DC14.4V
2.Measuring Meter : Digital Multi Meter
3.Measuring Point Reference : Between GND
4.Measuring Condition : at receiving FM Standard input

TO SCHEMATIC   TO CONTENTS

Description of IC Terminal

D78F4216AGC : IC1004 (#1, $1)

No.	Symbol	I/O	Terminal Description
1	IF MUTE	O	IF MUTE control terminal. (H:IF MUTE ON)
2	NC	-	No connect terminal.
3			
4	RDS-CONT	O	RDS data input prevention control terminal of adjoining station. (H:RDS OFF)
5	$\overline{\text{IF MUTE}}$(NC)	-	No connect terminal.
6	NC		
|			
8			
9	VDD	-	Power supply terminal.
10	X2	-	Crystal OSC connect terminal for main system clock OSC. (12.288MHz)
11	X1		
12	VSS	-	GND terminal.
13	XT2(NC)	-	No connect terminal.
14	XT1(GND)	-	GND terminal.
15	$\overline{\text{RESET}}$	I	System reset input terminal.
16	BATT-DET	I	BATT compulsion stand-by signal input terminal from VDD IC.
17	STANDBY	I	Stand-by signal input terminal from Main μ-COM.
18	NC	-	No connect terminal.
19	IS BUS Fin	I	IS BUS frame signal input terminal.
20	IS BUS REG	I	IS BUS communication control input terminal.
21	NC	-	No connect terminal.
22			
23	AVDD	-	Analog power supply terminal of A/D converter.
24	AVREF0	I	Standard voltage input terminal of A/D converter.
25	S-METER	I	Signal-Meter input terminal.
26	MULTIPATH	I	Multipath input terminal of RDS Decoder.
27	ADJCH-DET	I	Adjoining station detect input terminal.
28	SSTOP	I	FM station detect signal input terminal.
29	AMST/MP	I	SEEK STOP detect input terminal at AM. (H:Station ON)
30	AFC	I	FM station detect signal input terminal.
31	NC(GND)	-	GND terminal.
32			
33	AVSS	-	GND terminal of A/D converter.
34	NC	-	No connect terminal.
35			
36	AVREF1	I	Standard voltage input terminal of D/A converter.
37	IS BUS RX	I	IS BUS receiving terminal.
38	IS BUS TX	O	IS BUS transmitting terminal.
39	IS BUS Fout	O	IS BUS frame signal output terminal.
40	MONITOR RXD	I	Command input terminal for RDS monitor (P/C). (Pull-up connect)
41	MONITOR TXD	O	Status output terminal for RDS monitor (P/C).
42	NC	-	No connect terminal.
|			
47			
48	T-MUTE	O	MUTE signal output terminal to Main μ-COM.
49	NC	-	No connect terminal.
50			
51	MARKET1	I	Area set up terminal.
52	MARKET2		

NOTE : #1 : For IVA-D300R Model Only, $1 : For IVA-D300RB Model Only

TO SCHEMATIC TO CONTENTS

No.	Symbol	I/O	Terminal Description
53	MARKET3	I	Area set up terminal.
54	$\overline{\text{AUTOADJ}}$	I	Auto adjustment start signal terminal of FM/AM TUNER. (L:start)
55 | 71	NC	-	No connect terminal.
72	VSS	-	GND terminal.
73 | 80	NC	-	No connect terminal.
81	VDD	-	Power supply terminal.
82 | 91	NC	-	No connect terminal.
92	$\overline{\text{PAUSE}}$	I	Audio signal detect terminal. (L:Blank)
93	$\overline{\text{DAVN}}$	I	Data available input terminal of RDS Decoder.
94	TEST/VPP	-	GND terminal.
95	RDS SDA	I/O	Data input/output terminal to RDS Decoder.
96	RDS SCL	O	Clock output terminal to RDS Decoder.
97	IIC SCL	O	I2C clock output terminal to TUNER-IC(TDA7511).
98	IIC SDA	I/O	I2C data input/output terminal to TUNER-IC(TDA7511).
99	$\overline{\text{TUNER ON}}$(NC)	-	No connect terminal.
100	$\overline{\text{FM}}$/AM	O	FM/AM power supply switching terminal. (L:FM)

D70F3089YGJ : IC5001

No.	Symbol	I/O	Terminal Description
1	S-METER	I	Radio S-METER input terminal.
2	$\overline{\text{AUTO-ADJ}}$	I	Radio auto adjustment start terminal.
3	SSTOP	I	FM station detection terminal.
4	AM SD	I	AM station detection terminal.
5	PORTGND0	-	GND terminal.
6 | 14	NC	-	No connect terminal.
15	R-REM-SEL	O	Remote Control input signal selection terminal. (AUX-IN/EXT.BOX)
16	AUX2-REM-SEL3	O	AUX2 Remote Control-OUT control terminal.
17	AUX2-REM-SEL2		
18	AUX2-REM-SEL1		
19	AUX1-REM-SEL3	O	AUX1 Remote Control-OUT control terminal.
20	AUX1-REM-SEL2		
21	AUX1-REM-SEL1		
22	PORTVDD0	-	VDD terminal.
23	NAV-REM-SEL3	O	NAVI Remote Control-OUT control terminal.
24	NAV-REM-SEL2		
25	NAV-REM-SEL1		
26 27	NC	-	No connect terminal.
28	NC(PULL-DOWN)	-	Pull-down connect terminal.
29	NC	-	No connect terminal.
30	BW-CONT	O	Radio Band width switching control terminal.
31	FM/AM CONT	O	FM/AM switching signal output terminal.

TO SCHEMATIC TO CONTENTS

No.	Symbol	I/O	Terminal Description
32	NC	-	No connect terminal.
33	RA-SCL	I/O	Radio (TDA7511) I2C-BUS CLOCK terminal.
34	RA-SDA	I/O	Radio (TDA7511) I2C-BUS DATA signal terminal.
35	NC	-	No connect terminal.
36			
37	GND0	-	GND terminal.
38	CPUREG	-	GND connect terminal by capacitor (1uF).
39	VDD0	-	VDD terminal.
40	$\overline{\text{RESET}}$	I	System RESET signal input terminal.
41	Vpp	-	Vpp terminal.
42	VARI-SDA	O	Serial DATA terminal to E-VOL, AV-SELECTOR, System Regulator, IIS-BUS.
43	NC	-	No connect terminal.
44	VARI-SCL	O	Serial CLOCK terminal to E-VOL, AV-SELECTOR, System Regulator, IIS-BUS.
45	BAT-DET	I	BATT detection input signal terminal.
46	NC	-	No connect terminal.
|			
59			
60	PORTVDD1	-	VDD terminal.
61	NC	-	No connect terminal.
|			
64			
65	REM-OUT	O	Remote Control signal output terminal.
66	NC	-	No connect terminal.
67	OEM-SCL	I/O	OEM Sub DISP IIC CLOCK signal terminal.
68	OEM-SDA	I/O	OEM Sub DISP IIC DATA signal terminal.
69	NC	-	No connect terminal.
70			
71	NC(PULL-DOWN)	-	Pull-down connect terminal.
72	GND2	-	GND terminal.
73	XT1	-	Main CLOCK connect terminal.
74	XT2		
75	NC	-	No connect terminal.
76	AMP-PWM	O	AMP-LINK PWM output terminal.
77	P-CONT	O	PWR-ON signal output terminal.
78	R-VMUTE1	O	Rear Video MUTE signal (Monitor-1) terminal.
79	R-VMUTE2	O	Rear Video MUTE signal (for VPE-S431) terminal.
80	M1-AMUTE	O	Rear Audio MUTE signal (Monitor-1) terminal.
81	M2-AMUTE	O	Rear Audio MUTE signal (for VPE-S431) terminal.
82	ACC-DET	I	ACC detection signal input terminal.
83	MONITOR CONT	I	Touch Panel correspondence Rear Monitor detection signal input terminal.
84	EXB-SDA	I/O	EXB IIC DATA input/output signal terminal.
85	DSP-RESET	O	DSP RESET output signal terminal.
86	EXB-SCL	O	EXB IIC CLOCK signal output signal terminal.
87	P-IC CONT	O	PWR-IC power supply control output terminal.
88	M-CTL	O	Ai-NET power supply control signal output terminal.
89	AI-RS	O	Ai-NET register selection signal output terminal.
90	AI-R/W	O	Ai-NET read/write selection signal output terminal.
91	AI-RESET	O	Ai-NET BUS IC RESET signal output terminal.
92	PORTGND1	-	GND terminal.
93	AI-SCLK	O	CLOCK pulse signal output terminal for Ai-NET serial communication.

TO SCHEMATIC

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No.	Symbol	I/O	Terminal Description
94	AI-SIN	I	Pulse signal input terminal for Ai-NET serial communication.
95	AI-SOUT	O	Pulse signal output terminal for Ai-NET serial communication.
96	AI-INT	I	Ai-NET interrupt request signal input terminal.
97	AMP-CLK	I	AMP-LINK serial CLOCK input terminal.
98	AMP-SI	I	AMP-LINK serial DATA input terminal.
99	AMP-SO	O	AMP-LINK serial DATA output terminal.
100	LPF1	O	LPF control signal output terminal. (H:at ST, L:at MONO)
101	LPF2	O	LPF control signal output terminal. (H:at MONO, L:at ST)
102	PORTVDD2	-	VDD terminal.
103	A-MUTE	O	Audio MUTE signal output terminal.
104	GUIDE-CONT	I	NAVI Video/Audio interrupt signal terminal. (H:interrupt)
105	NRGB	I	NAVI RGB/NTSC detection signal terminal. (H:RGB, L:Composite)
106	SYS-RESET	O	System Regulator RESET output signal terminal.
107	RDS-RXD	I	RDS u-COM communication IS-BUS RX terminal.
108	RDS-TXD	O	RDS u-COM communication IS-BUS TX terminal.
109	RDS-FOUT	O	RDS u-COM communication IS-BUS FRAME signal output terminal.
110	RDS-FIN	I	RDS u-COM communication IS-BUS FRAME signal input terminal.
111	NC(PULL-UP)	-	Pull-up connect terminal.
112	NC	-	No connect terminal.
113	RDS-STBY	O	Serial CLOCK terminal for connecting terminal.
114	IN-INT	I	IN-INT input signal terminal.
115	REVERSE	I	Rear Camera signal input terminal.
116	IS-FIN	I	FRAME siganl input terminal for u-COM communication between MAIN and FRONT.
117	IS-RX	I	RX siganl input terminal for u-COM communication between MAIN and FRONT.
118	IS-TX	O	TX siganl input terminal for u-COM communication between MAIN and FRONT.
119	IS-FOUT	O	FRAME siganl output terminal for u-COM communication between MAIN and FRONT.
120	IS-REQ	O	RDS IS-BUS communication control output terminal. (L:communication permission to RDS u-COM)
121	P-ANT	O	P-ANT control signal output terminal.
122	H-PARK	I	Hand Brake input signal terminal. (H:vehicle stopping, L:vehicle running)
123	F-PARK	I	Foot Brake input signal terminal. (H:vehicle stopping, L:vehicle running)
124	F-STBY	O	Stand-by signal output terminal to FRONT u-COM.
125	NC	-	No connect terminal.
|			
127			
128	VDD1	-	VDD terminal.
129	NC	-	No connect terminal.
130			
131	GND1	-	GND terminal.
132	DSP-SDA	O	DSP IIC BUS DATA output terminal.
133	DSP-SCL	O	DSP IIC BUS CLOCK output terminal.
134	NC	-	No connect terminal.
135	AREA1	I	AREA switching-1 terminal.
136	AREA2	I	AREA switching-2 terminal.
137	NC(PULL-DOWN)	-	Pull-down connect terminal.
|			
141			
142	FM-AFC	I	FM AFC input terminal.
143	VDD(A/D)	-	VDD terminal for A/D Converter.
144	GND(A/D)	-	GND terminal for A/D Converter.

TO SCHEMATIC

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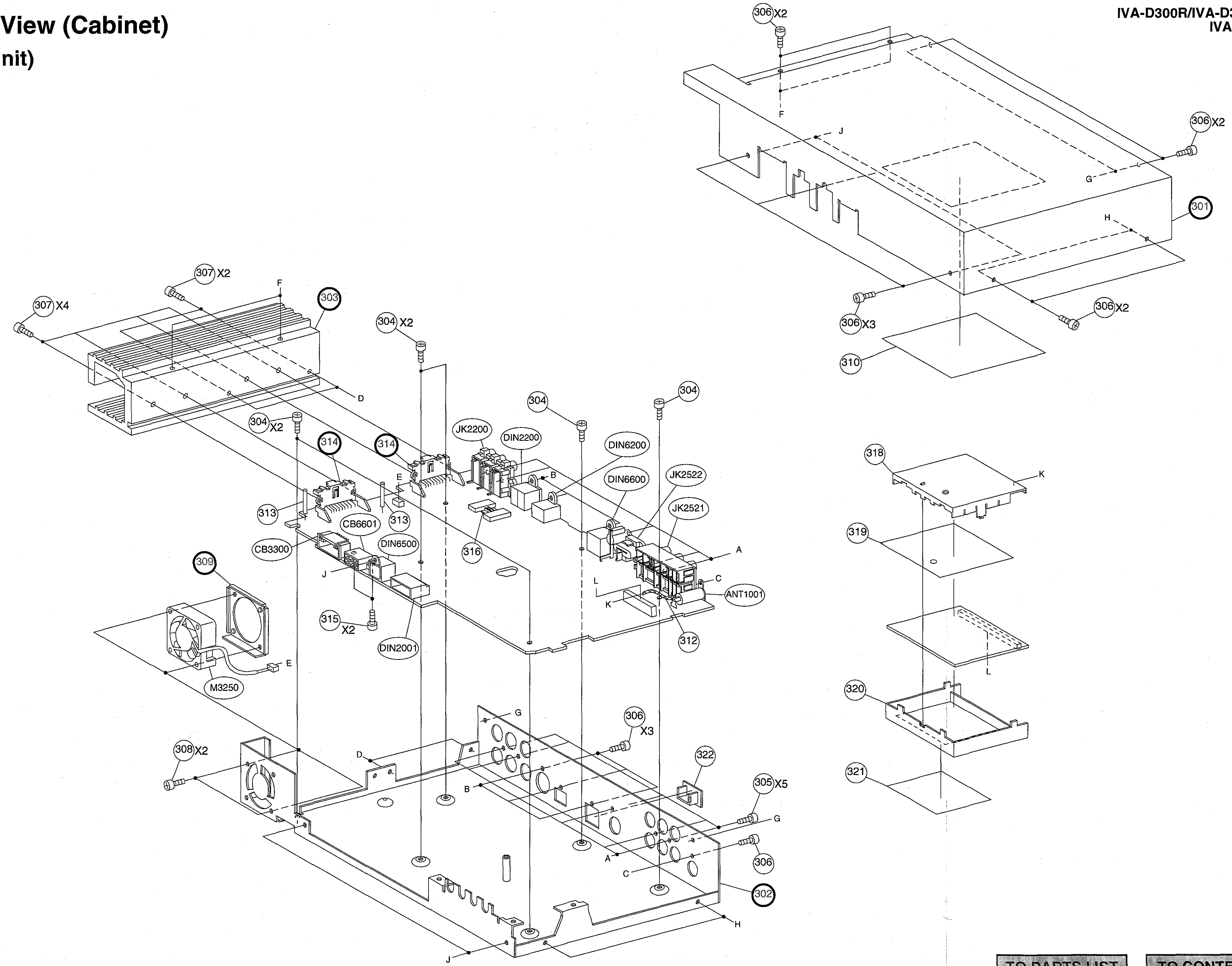
Exploded View (Cabinet)

(Tuner Unit)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D
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304
304
304 X2
314
314
JK2200
DIN2200
DIN6200
B
DIN6600
JK2522
JK2521
E
313
313
CB6601
DIN6500
CB3300
316
A
C
ANT1001
L
K
J
309
315 X2
DIN2001
312
E
M3250
318
K
319
L
320
321
G
306 X3
322
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* DC/DC Converter Unit Block

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NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

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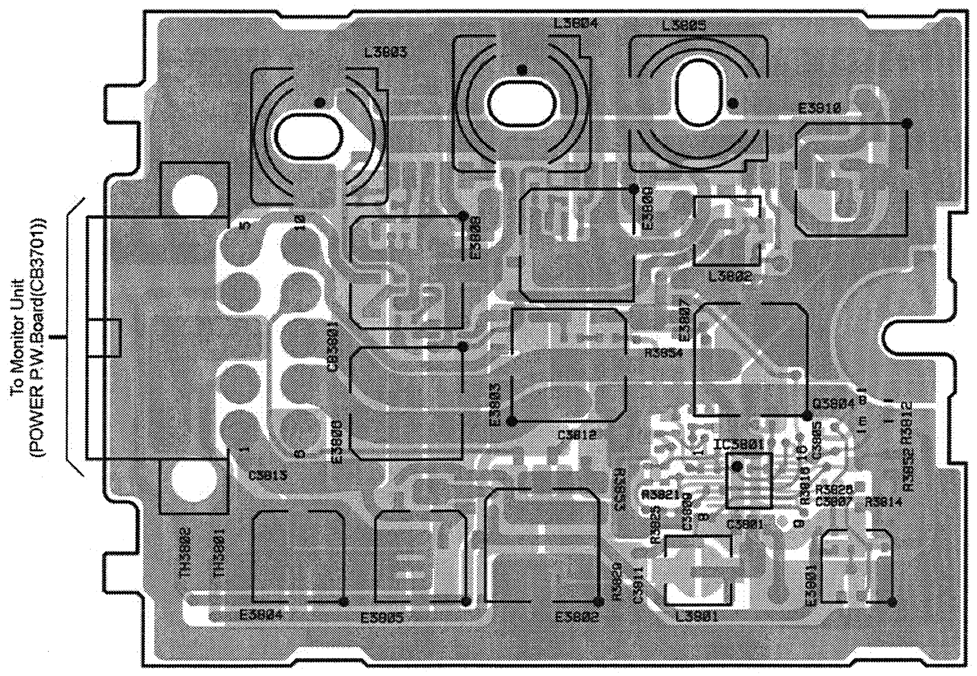
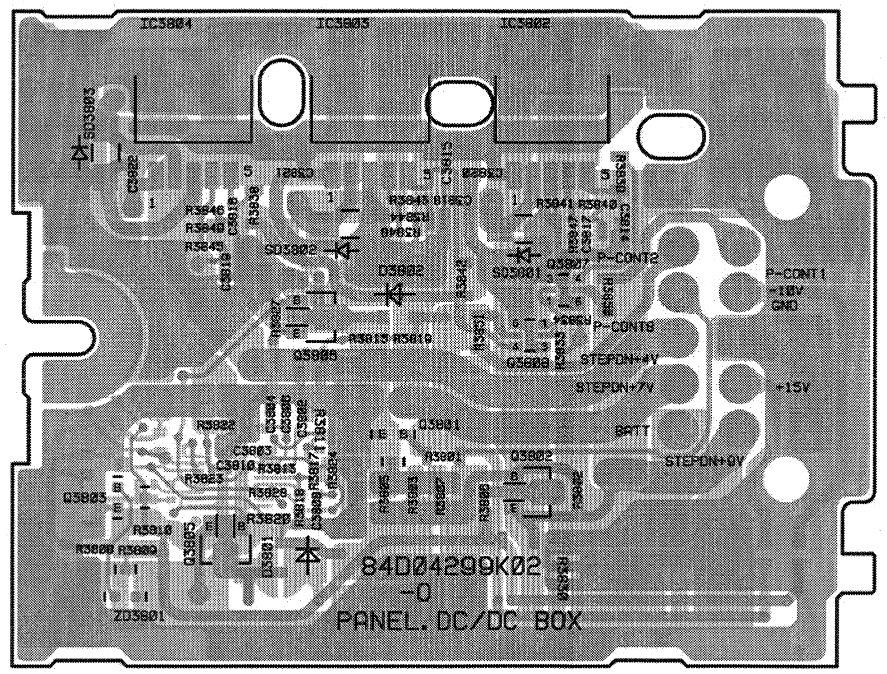
PBOX P.W.Board (Component Side View)


To Monitor Unit
(POWER P.W.Board(CB3701))
L3803
L3804
L3805
E3810
E3808
E3809
L3802
E3807
CB3801
E3803
E3806
C3812
C3813
R3854
IC3801
Q3804
TH3802
TH3801
E3804
E3805
E3802
L3801
E3801
C3801
R3814

PBOX P.W.Board (Foil Side View)

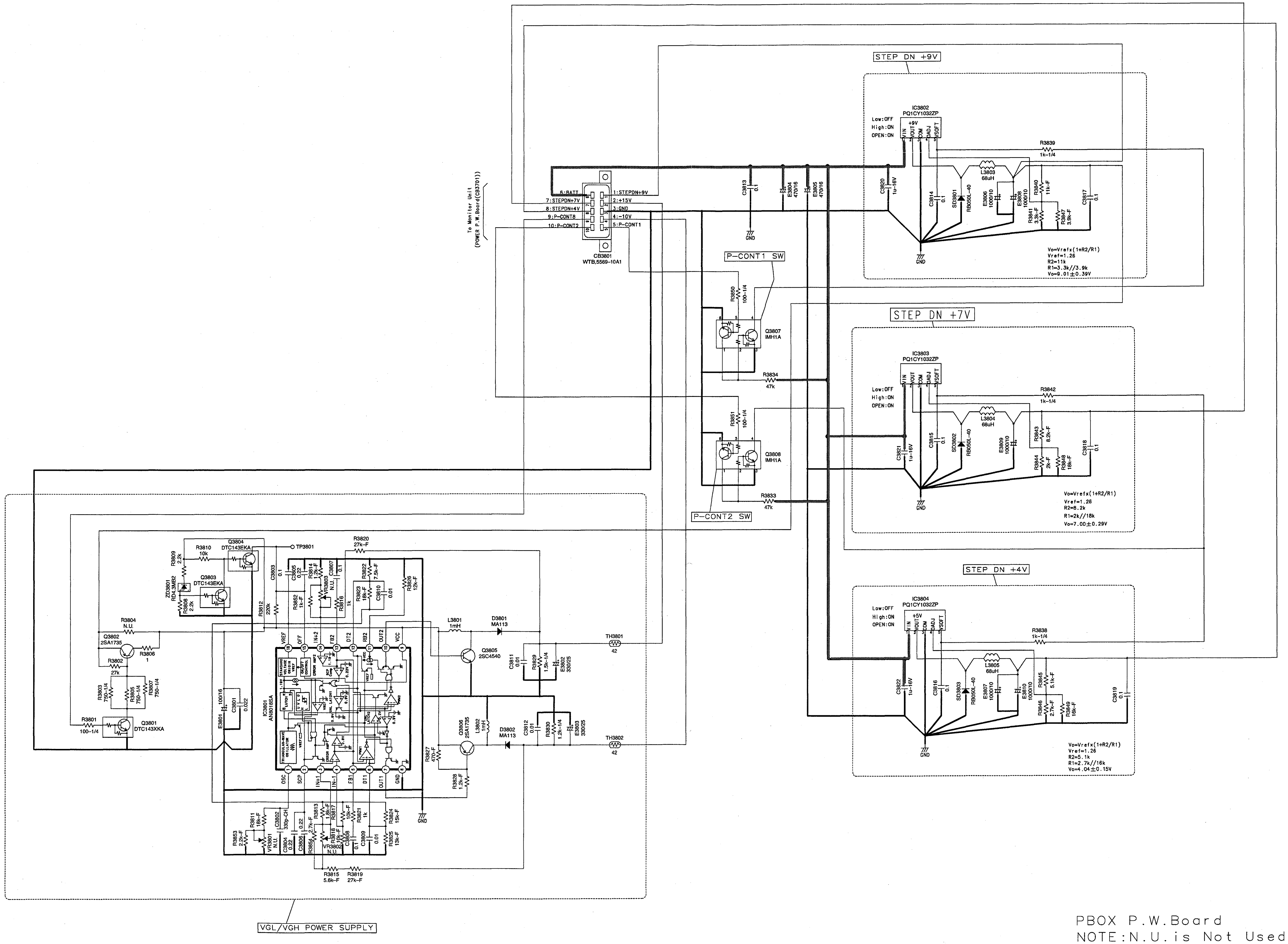

IC3804
IC3803
IC3802
SD3803
SD3802
D3802
SD3801
Q3807
P-CONT2
P-CONT1
-10V
GND
P-CONT8
Q3808
Q3806
STEPDN+4V
STEPDN+7V
+15V
BATT
STEPDN+9V
Q3801
Q3802
Q3803
Q3805
D3801
ZD3801
84D04299K02
-0
PANEL. DC/DC BOX

Orange Color Pattern:Component Side Pattern
Blue Color Pattern:Foil Side Pattern

A | B | C | D | E | F | G

Schematic Diagram

IVA-D300R/IVA-D300RB/ IVA-D300E

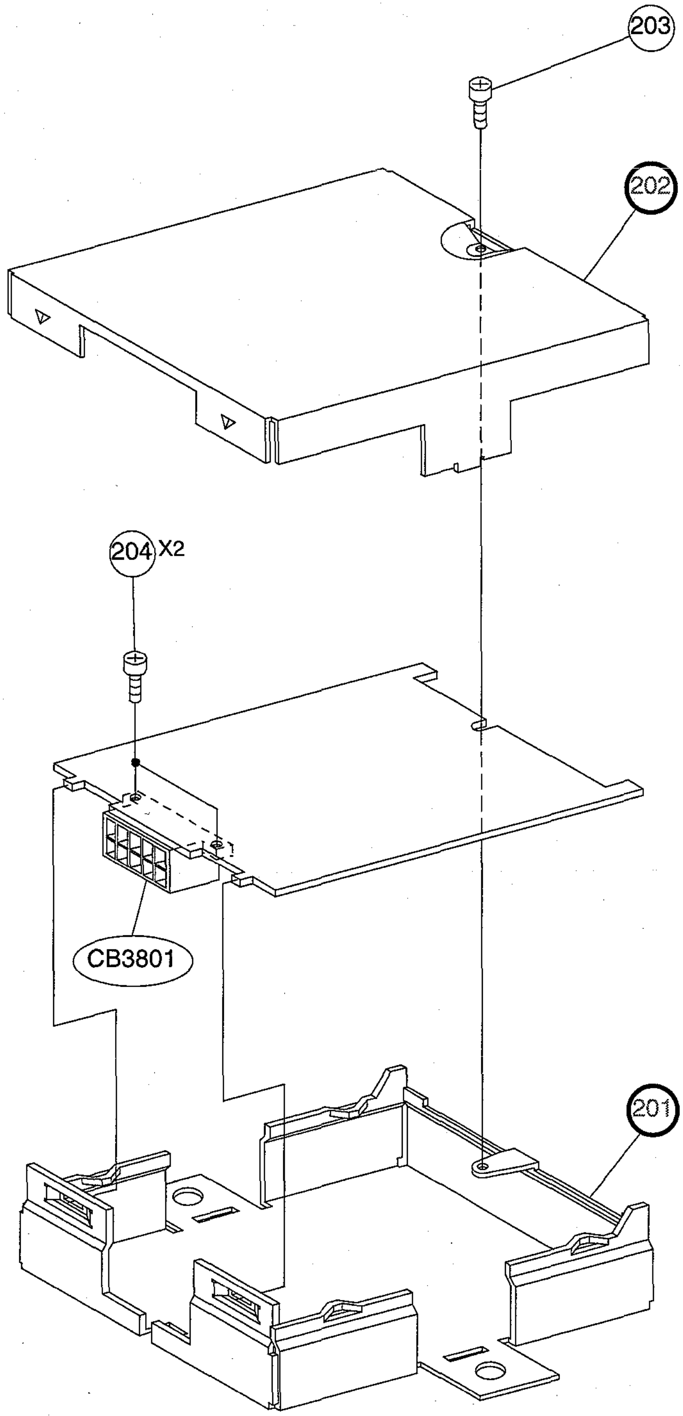

A
B
C
D
E
F
1
2
3
4
5
To Monitor Unit (POWER P.W.Board(CB3701))
CB3801
WTB,5569-10A1
6:BATT
7:STEPDN+7V
8:STEPDN+4V
9:P-CONT8
10:P-CONT2
1:STEPDN+9V
2:+15V
3:GND
4:-10V
5:P-CONT1
STEP DN +9V
IC3802
PQ1CY1032ZP
Low:OFF
High:ON
OPEN:ON
R3839
1k-1/4
L3803
68uH
Vo=Vrefx(1+R2/R1)
Vref=1.26
R2=11k
R1=3.3k//3.9k
Vo=9.01±0.39V
P-CONT1 SW
R3850
100-1/4
Q3807
IMH1A
R3834
47k
STEP DN +7V
IC3803
PQ1CY1032ZP
R3842
1k-1/4
L3804
68uH
Vo=Vrefx(1+R2/R1)
Vref=1.26
R2=8.2k
R1=2k//18k
Vo=7.00±0.29V
R3851
100-1/4
Q3808
IMH1A
R3833
47k
P-CONT2 SW
STEP DN +4V
IC3804
PQ1CY1032ZP
R3838
1k-1/4
L3805
68uH
Vo=Vrefx(1+R2/R1)
Vref=1.26
R2=5.1k
R1=2.7k//16k
Vo=4.04±0.15V
GND
Q3804
DTC143EKA
Q3803
DTC143EKA
TP3801
R3820
27k-F
R3804
N.U.
Q3802
2SA1735
Q3801
DTC143XKA
R3801
100-1/4
IC3801
AN8016SA
L3801
1mH
D3801
MA113
Q3805
2SC4540
Q3806
2SA1735
D3802
MA113
TH3801
42
TH3802
42
R3815
5.6k-F
R3819
27k-F
VGL/VGH POWER SUPPLY

PBOX P.W.Board
NOTE:N.U. is Not Used Parts.

TO P. W. BOARD TO PARTS LIST TO CONTENTS

Exploded View (Cabinet)

(DC/DC Converter Unit)


203
202
204 X2
CB3801
201

TO PARTS LIST

TO CONTENTS

Terminal Voltage of IC/TR

<PBOX P.W.Board>

IC3801					
1	0.49	PS	9	8.88	
2	0.06		10	0.39	PS
3	0.64		11	0.55	
4	0.65		12	0.4	
5	0.41		13	0.48	
6	0.6		14	1.24	
7	5.3	PS	15	1.83	
8	0		16	1.25	

IC3802		
1	14.26	
2	9.1	PS
3	0	
4	1.29	
5	6.84	

IC3803		
1	14.26	
2	7.12	PS
3	0	
4	1.31	
5	6.81	

IC3804		
1	14.26	
2	4.17	PS
3	0	
4	1.32	
5	6.81	

Ref. No.	E	B	C
Q3801	0	2.67	0.19
Q3802	8.99	8.22	8.96
Q3803	0	2.24	0
Q3804	0	0	1.87
Q3805	0	0.39(PS)	8.65(PS)
Q3806	8.87	8.43(PS)	0.48(PS)

Ref. No.	1	2	3	4	5	6
Q3807	0	0	0	6.84	4.07	0
Q3808	0	0	0	6.81	4.04	0

[Measuring Conditions]
1.Power Supply Voltage : DC14.4V
2.Measuring Meter : Digital Multi Meter
3.Measuring Point Reference : Between GND
4.Measuring Condition : at playing DVD

TO SCHEMATIC TO CONTENTS